

# **WATER USE MANAGEMENT PLAN**

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# TABLE OF CONTENTS

## **SECTION 1. INTRODUCTION**

- 1.1 POLICY STATEMENT
- 1.2 EXECUTIVE SUMMARY
- 1.3 DEFINITIONS

## **SECTION 2. PUBLIC EDUCATION**

## **SECTION 3. PROGRAM IMPLEMENTATION**

- 3.1 ANNUAL IMPLEMENTATION REVIEW
- 3.2 REGULAR IRRIGATION SCHEDULES
- 3.3 ALTERNATIVE IRRIGATION SCHEDULES
- 3.4 SPECIAL CIRCUMSTANCES
- 3.5 ENFORCEMENT
- 3.6 DEMAND MANAGEMENT TOOLS

## **SECTION 4. DATABASE MANAGEMENT**

## **SECTION 5. LANDSCAPE PROFESSIONALS – Maintenance/Design/irrigation**

## **SECTION 6. RAIN WATER COLLECTION**

## **SECTION 7. APPENDICES**

- EXHIBIT 1 WATER RESTRICTION CODE – CHAPTER 13.15
- EXHIBIT 2 ANNUAL REVIEW RECOMMENDATIONS/ISSUES LIST
- EXHIBIT 3 SAMPLE WATER SCHEDULE & CUSTOMER LETTER
- EXHIBIT 4 SAMPLE NON-RESIDENTIAL COMMUNICATIONS
- EXHIBIT 5 NON-RESIDENTIAL MAINTENANCE SUBMITTAL
- EXHIBIT 6 TEMPORARY IRRIGATION EXEMPTION APPLICATIONS
- EXHIBIT 7 EXEMPTION PLACARD
- EXHIBIT 8 SPECIAL PRESSURE RELATED AREA SCHEDULE
- EXHIBIT 9 WATER MONITOR TRAINING GUIDELINES
- EXHIBIT 10 VIOLATION AFFIDAVIT FORM
- EXHIBIT 11 SAMPLE WARNING LETTER
- EXHIBIT 12 SAMPLE SUBSEQUENT ENFORCEMENT/VIOLATION NOTIFICATION
- EXHIBIT 13 REQUEST FOR WAIVER PROCESSING FORM
- EXHIBIT 14 LANDSCAPE PROFESSIONAL QUALIFICATION FORMS
- EXHIBIT 15 SOIL/IRRIGATION INSPECTION REQUEST



## **Section 1. Introduction**

- 1.1 Policy Statement
- 1.2 Executive Summary
- 1.3 Definitions

## 1.1 Policy Statement

The Town of Castle Rock is committed to the wise development and use of water resources. The water use management program is designed as a demand management tool to allow adequate volumes and pressures to the water distribution system during landscape irrigation season. This program operates in concert with the Town of Castle Rock Landscape and Irrigation Performance Standards and Criteria Manual and the Water Conservation Efficiency Master Plan to encourage wise use of a finite resource.

## 1.2 Executive Summary

The Town of Castle Rock has used mandatory water demand management for landscape irrigation since 1985. Peak season demands are staggered on an every-third-day format along with designated irrigation times. This format allows positive pressure to be maintained throughout the water system while maintaining appropriate fire flows, as well as allocates time for reservoir volume recovery.

Program administration and implementation has traditionally been accomplished through the Utilities Department ~~Department~~ **Castle Rock Water** of the Town of Castle Rock. The Town's water restrictions, Chapter 13.15 of the Castle Rock Municipal Code, are included as Exhibit 1.

The water use management program implementation policy assists staff with implementation of the Water Use Management Plan (WUMP) that deals with management of peak season related water use issues. On an annual basis, water conservation staff reviews and updates this policy for review and approval by Town Council as needed.

The policy addresses:

### Components of the Water Use Management Plan

- ◆ *Regular days/hours for irrigation.*
- ◆ *~~Alternating~~ **Alternative** schedules.*
- ◆ *Special watering circumstances.*
- ◆ *Enforcement.*
- ◆ *Appeals process.*

- Identification of regular days and hours for landscape irrigation during designated peak demand months, i.e. irrigation schedule development.
- The need for alternative schedules due to various hardships and/or irrigation system limitations, and applicable criteria.
- Special watering circumstances, including hand watering.
- Enforcement of water use management strategies by issuance of warnings, surcharges and ultimately the potential for discontinuance of water service.
- Appeals and variance issues.
- Further demand management tools.

## 1.3 Definitions

**Alternative irrigation schedule:** Schedules that do not meet the regular schedule criteria as outlined in this policy that have been approved by the program administrator.

**Common area:** Streetscaping, whether publicly or privately owned, managed, or maintained.

**Hand watering:** Application of water to plant material while holding a hose in hand.

**Irrigation season:** May 1 through September 30.

**Landscape maintenance contractor:** Designated by owner or responsible party to irrigate and maintain property and irrigation system of a defined property.

**Owner:** Party identified by water service application and Town of Castle Rock ~~water utility~~ billing records.

**Program administrator:** As defined by municipal code, is the Town Manager or designee thereof.

**Public area:** Town-owned, maintained and managed properties and facilities.

**Residential:** Account category identified in Town of Castle Rock utility billing records.

**Responsible party:** Person or group identified in the Town of Castle Rock ~~water billing~~ ~~Utility Billing~~ or by owner as such, including owner, property manager or homeowners' association representative.

**Restriction Period:** Time period when every third day watering is enforced. See current year calendar for specific dates.

**Special schedule:** Approved alternative schedule designated for the current irrigation season.

**Tap size:** Size of tap and meter service serving a property or address.

**Water Budget:** The water budget is in effect through the growing season – April through October.

**Water waste:** Application of water that does not result in beneficial use of the water. This includes:

- Continuous irrigation to any area resulting in ponding or pooling of water;
- Runoff water not absorbed into the ground or soil which flows away from the area being irrigated;
- Failure to repair any irrigation system that is leaking;
- Application of water intended for irrigation to any impervious surface;
- Letting water run unrestricted from a hose or faucet to drainage;
- Application of water to impervious surfaces such as street washing applications;
- Operation of any irrigation system when curtailment stages have been invoked.

**Xeriscape Design:** Use of low water consumption landscape design.



## **Section 2. Public Education**

## 2.1 Education

Public education is a primary component of the WUMP. Outdoor water use during the April through October landscape irrigation season accounts for the largest demand on the system. Educating customers on the need for adherence to the irrigation schedule and water use management program is the key to compliance. The water delivery system is designed for management of peak demand by staggering landscape irrigation on an every third day format. This reduces the necessary amount of water system infrastructure, water resource acquisition, treatment, distribution and storage. Adherence to the every third day format ensures adequate system pressure and fire flow capacities.

*Education efforts will focus on informing customers of the Town of Castle Rock's ongoing water conservation program and to aid landscape professionals to be more water efficient.*

Part of enforcement is to educate customers on these issues, and offer assistance with irrigation system problems and water use management when possible. This assistance is offered through newsletters, individual letters and one-on-one communications. The Town of Castle Rock maintains two web sites ([CRgov.com](http://CRgov.com) and [CRconserve.com](http://CRconserve.com)) where additional information about WUMP policies and water conservation efficiency efforts can be found. All **Castle Rock Water** utility staff is trained on the basics of this program annually. Monitors receive additional in depth training. The focus of the program is compliance to protect the integrity of the water system, and to provide safe and adequate water to all customers.

Annual public education strategies are developed in relation to the Water Use Management Plan and water conservation programs. This includes providing water conservation information for residents, residential builders, property management, as well as non-residential community.



### **Section 3. Program Implementation**

- 3.1 Annual Implementation Review
- 3.2 Regular Irrigation Schedules
- 3.3 Alternative Irrigation Schedules
- 3.4 Special Circumstances
- 3.5 Enforcement
- 3.6 Demand Management Tools



### 3.1 Annual Implementation Review

The water use management program and policy is reviewed on an annual basis, and submitted to the ~~Castle Rock Water Utilities~~ Commission for review. Program and policy changes are then forwarded to Town Council for adoption as needed. The Town Council may alter this program and its implementation as deemed necessary.

### 3.2 Regular Irrigation Schedules

#### 3.2.1 Demand Use Management Period

During designated months, watering use management criteria shall be implemented.

#### 3.2.2 Residential

- A. *Day/Address Assignment:* Watering shall be limited to every-third-day in accordance with the following procedure:
  - 1. Properties with an assignment address ending in zero (0) through three (3) are designated by a square .
  - 2. Properties with an assignment address ending in four (4) through six (6) are designated by a circle.
  - 3. Properties with an assignment address ending in seven (7) through nine (9) are designated by a diamond.
- B. *Permissible Hours of Irrigation:* ~~Permissible~~ hours of irrigation 8 p.m. to 8 a.m. Under no circumstances, beyond hand watering, will irrigation be allowed between the hours of 8 a.m. to 8 p.m.
- C. *Schedule Dissemination Criteria:* Schedules shall be distributed to water customers no later than thirty (30) days prior to the commencement of the irrigation season: See Exhibit 3 for a sample schedule and customer letter.
  - 1. The watering schedule shall be distributed through the U.S. Postal Service to all Town of Castle Rock residents.
  - 2. The Town Clerk shall receive a copy of the watering schedule.
  - 3. The watering schedule shall be posted at Town Hall and ~~Castle Rock Water the Utilities Department~~ ~~Offices~~.
  - 4. The watering schedule shall be published at least twice in a newspaper of general circulation.
  - 5. The watering schedule and a general outline of the policy will be posted on the Town's web site.
  - 6. Watering schedules shall be made available to all building permit applicants where the permit includes installation of an irrigation system, or when the building permit is for the sole purpose of installation of an irrigation system.
- D. *New Customers:* All parties that become new customers between the time the watering schedules were mailed and the end of the peak demand season are given watering schedules and educational materials upon application for water service.

- E. *Residential Home Builders:* Home builder landscape contractors that install and/or maintain residential landscaping shall be registered with the Town of Castle Rock to ensure that those managing the properties are thoroughly versed on Water Use Management Plan and Landscape Regulation and Principles criteria. See Section 5 for information regarding registration of landscape maintenance professionals. Until the homes are sold to the individual owner, these homes shall be designated as non-residential, and shall be billed as such.

### **3.2.3 Non-Residential/Common Area/Public Area Irrigation**

Non-residential, common, and public irrigated areas shall be considered as any property that is managed or owned by the same group or individual, including single or multi-family homes still under the control of the builder, streetscapes, common areas, or private areas. The “property” shall be considered one entity for the purpose of water restriction administration and enforcement regardless of the number of metered services serving the property.

- A. *Day/Address Assignment:* Address assignment for the entire property will be based on the last number of the property address as designated by the responsible party. Watering shall be limited to every third day in accordance with the aforementioned procedure. Day is dictated by the day which irrigation will begin for that daily cycle.
- B. *Permissible Hours of Irrigation:* Permissible hours of irrigation for regular non-residential, common, and public areas shall be between the hours of 10:00 p.m. and 5:00 a.m. Under no circumstances, beyond hand watering, will irrigation be allowed between the hours of 8 a.m. and 8 p.m.
- C. *Application Rates:* Total water application shall not exceed 1.5 inches per week, per irrigation zone. Information confirming application rates must be submitted.
- D. *Schedule Submittal Requirements:* All irrigation schedules for non-residential properties must be submitted to the Town of Castle Rock for review and approval. These schedules must be submitted within ten (10) days of system activation; and no later than April 30 each year. Those properties that have not submitted a schedule will be considered out of compliance with the water use management program and will be subject to enforcement action. (See Non-Residential Schedule Application, Exhibit 5.)

Submittals shall include:

1. Completed application, including landscape contractor and responsible party signatures and contact information.
2. Designated start day (square, circle, diamond) and total peak time required to complete the programmed run time
3. If property is utilizing a “Smart” controller, indicate make, model, scheduled run days, and confirm ability to water within the designated watering window.
4. Designated area maps are not required if current GIS image is accurate and up to date.
5. Specific location.
6. Number, size and location of water meters serving property.

7. Identification of standard irrigation checks and procedure identification.
  8. Identification of response time following notification of irrigation system malfunctions by staff.
  9. Town of Castle Rock registered landscape professional maintenance contractor registration number.
- E. *Leaking Irrigation Systems:* As deemed necessary, the Town has the ability to charge property owners for nighttime emergency call-outs that are attributable to malfunctioning, leaking irrigation systems that are not repaired on a timely basis. Three or more call-outs of this type shall be considered excessive and is subject to incur the associated charges.
- F. *Registered Landscape Professionals – Maintenance:* Non-residential property maintenance management agencies shall be registered by the Town of Castle Rock to ensure that those managing the properties are thoroughly versed on Water Use Management Plan and Landscape Regulation and Principles criteria. See Section 5 for information regarding registration of landscape maintenance professionals.

### 3.3 Alternative Irrigation Schedules

#### 3.3.1 Exemptions

Exemptions to the every-third-day format may be granted for hardship and/or special circumstances. The applicant must complete and submit an application for such an exemption. The application shall contain the applicant's name, the address of the premises requiring the exemption, the reason requiring the exemption, the approximate square footage requiring irrigation and a description of the type and form of plant material requiring irrigation. (See Irrigation Exemption Application; Exhibit 6 and Exemption Placard, Exhibit 7.)

Under no circumstances, beyond hand watering or approved hydro seeding, will irrigation be allowed between the hours of 8 a.m. and 8 p.m. Per *Municipal Code*, an administrative fee up to \$25 may be charged for processing of exemption applications.

Should the administrator of the Water Use Management Plan determine that granting the exemption would not significantly impact the water system, the administrator may issue an exemption, stating appropriate conditions thereon. These conditions are specifically to include the effective date, expiration date, designated address, designated areas for exempted irrigation, required hours of irrigation, and any other special criteria associated with the exemption. These exemptions may be revoked at any time should it be deemed necessary by the Town of Castle Rock such circumstances including but not limited to the exemption compromises the ability to provide water to deliver domestic or other water services.

Exemptions may be granted for:

- A. *Establishment of New Plant Material:* An exemption to the established watering schedule may be granted to establish new plant material for the duration of up to 30 days for new sod/ground covers/perennials/trees and up to 45 days for new seed provided a permit is obtained through **Castle Rock Water** the Utilities Department. Conditions for issuance of this permit include:
  - a. Verification through site inspection by the Program Administrator, through certification by

accredited landscape architect or the builder, through documentation by receipt or invoice, or through other means deemed acceptable by the Program Administrator, that prior to seeding or sodding of turf, soil amendment at a **minimum** of four (4) cubic yards pure organic matter per one thousand (1,000) square feet or deemed by soil analysis, and has been tilled or by other means made soil loose to a minimum depth of six (6) inches, which will result in optimal water utilization for turf root systems. Acceptable organic matters include aged compost, wood humus from soft/nontoxic trees, sphagnum moss (excluding that from Colorado origin), or aged/treated manures.

- b. Evidence that ~~an a test of the~~ irrigation system backflow prevention ~~assembly device~~ has been installed, ~~and~~ tested and approved, or will be tested within ten (10) days of bringing the irrigation system into operation.
- c. Permit is displayed so - it is clearly visible from the street.

Watering occurs between the hours as established by the Program Administrator in Section 3.2.

- B. *Disease Mitigation:* Exemptions may be granted to assist with mitigation of diseased plant material. Exemptions of this type are reviewed on a case-by-case basis. Potential exemptions are related directly to the disease or issue to be mitigated. Irrigation, however, must occur within the regularly scheduled hours. A certificate that identifies the duration of the exemption will be issued and must be displayed so that it is clearly visible from the street.
- C. *Fertilization:* Exemptions may be granted to allow daily watering for application of fertilizer material. Exemptions of this type are reviewed on a case-by-case basis. Potential exemptions are related directly to the square footage, type of fertilization process, and current weather conditions. Duration of additional irrigation shall be determined by staff and shall not exceed the manufacturer's recommendation for application. Irrigation must occur within the regularly scheduled irrigation hours. It is not necessary to have the applicant place a certificate in a visible location due to the short time frame allowed by this type of exemption. This will be tracked internally in the water use management database.
- D. *Hydro-seeding:* Exemptions may be granted to allow daily watering for establishment of hydro-seeded areas, which shall include areas used for:
  - 1. Storm water retention
  - 2. Re-vegetation of over-lot areas
  - 3. Commercial installations
  - 4. Residential installations performed by Town of Castle Rock registered landscape contractors

Exemption requests are reviewed on a case-by-case basis, and shall meet the following criteria:

- a. Be installed and maintained during establishment period by a Town of Castle Rock registered landscape maintenance contractor.
- b. Shall complete special schedule application and submit associated irrigation management information.

Staff may determine that irrigation may be allowed during identified water system recovery periods.

- E. *Special Schedules for Non-Residential Properties:* Special schedule applications for non-residential areas may be granted for areas installed prior to 2002, based on a demonstrated hardship at the dis-

cretion of the Program Administrator. Applications shall include all submittal requirements identified in Section 3.2.3. Town of Castle Rock registered landscape maintenance contractors shall administer special schedules. See Section 5 for information regarding registration of landscape maintenance professionals.

- F. *Other:* Other exemptions may be granted should the program administrator determine that a hardship or special circumstance exists for an applicant, due to irrigation requirements that cannot be met under previously outlined criteria, including but not limited to:
1. Residential customers/small commercial customers with large lots, between 5,000 and 10,000 square feet of landscaped area, and limited irrigation systems that cannot irrigate the landscaped area effectively within the allotted hours. For example, the customer may then seek to split the property into two or more designated symbol watering days. However, no more than 1.5 inches of water per week may be applied.
  2. Residential customers that do not have programmable irrigation systems that are going on vacation, have a family emergency, or similar demonstrated hardship may receive an exemption to alter their assigned watering day on a time-limited basis as approved by the program administrator.
  3. All non-residential properties will water during overnight hours of 10 p.m. – 5 a.m.

Exemptions allowing daily watering are applicable only to the areas designated on the exemption application. Non-applicable areas are not included under the exemption and may not be exempted from every-third-day irrigation requirements.

### **3.4 Special Circumstances**

#### **3.4.1 Low Pressure Areas**

Certain existing areas of Town have blocks of homes with addresses that ending in the same digit. With the water system infrastructure being designed with the every-third day schedule in mind, several addresses in a limited area watering at the same time can create a low-pressure situation. Assigning altering symbols to the impacted homes mitigates this situation. Special schedules are given to these homeowners each year. See Exhibit 8 for these impacted areas, as well as the letter and special schedule that is distributed to these homeowners in Founders Village.

#### **3.4.2 Master Metered Properties**

For those properties that have one meter for several addresses or buildings, additional schedules may be mailed or hand delivered to each resident of the property to ensure that they receive notification of the restrictions. An example of this is the Castle Park Trailer Park.

#### **3.4.3 Hand Watering**

Watering plant material while holding a hose in hand is allowed at any time and day as long as water waste is not occurring. Hand watering does not include irrigation with a hose and sprinkler, or manual operation of an automated irrigation system.

#### **3.4.4 Water for Entertainment**

Water used for entertainment purposes, i.e. children running through sprinklers, is allowed so long as persons are present. If no persons are present, water monitors shall attempt to verify whether irrigation devices or systems in operation have been used for entertainment purposes by evidence of presence of toys, etc.

#### **3.4.5 Pressure Washing**

Pressure washing may be allowed according to the following criteria:

- A. Low water use equipment.
- B. Water waste shall not occur.
- C. No excessive runoff shall leave site where water is being applied. High efficiency and low water use power washers and/or street brushing systems are required.
- D. Equipment and application shall meet all Town of Castle Rock Cross-Connection Control Program criteria.

#### **3.4.6 Street Washing**

- A. *Streets*: Application of water to streets for the purpose of street washing shall occur by use of water efficient street sweeping equipment only. Use of fire hydrants is not allowed. Use of water trucks for the purpose of street sweeping is not allowed.
- B. *Drive-Through Restaurants*: Application of water to impervious surfaces related to drive-through restaurant food service areas may be allowed under the following circumstances:
  - 1. Town may request owner/operator of facility to obtain a letter from the Tri-County Health Department requiring cleaning of prescribed areas. A copy of such shall be submitted to the Town of Castle Rock, and a copy shall be posted on-site.
  - 2. Water waste shall not occur.
  - 3. No excessive runoff shall leave site where water is being applied. High efficiency and low water use power washers and/or street brushing systems are required.
- a. Sidewalks/Driveways – Application of water to sidewalks and driveways by homeowners for the purpose of cleaning is discouraged, and may be considered water waste. Whenever possible, areas should be swept to eliminate site debris. Such water use may be allowed under the following circumstances:
  - 1. Water waste shall not occur.
  - 2. No excessive runoff shall leave the site where water is being applied.
  - 3. Automatic shut off spray nozzles on hoses; such as pistol grip sprayers shall be used.
  - 4.

#### **3.4.7 Car Washing**

- A. Commercial car wash installations shall meet the following criteria:
  - 1. Newly constructed facilities, whether full-service, in bay, or self-serve shall use water recycling

- systems or weep recovery systems.
2. Demand management tools consistent with curtailment identified in Section 3.6 shall apply to all commercial car wash systems.
  3. Existing car washing systems that are being expanded, repaired or rehabilitated shall conform to recycling requirements.

The Town shall consider incentive-based programs for retrofit of existing systems as identified in the Water Conservation Program.

**B. Homeowner car washing:**

1. There are no limitations for hours or days a homeowner may wash vehicles.
2. Water waste shall not occur.
3. No excessive runoff shall leave the site where water is being applied.
4. Require use of automatic shut off spray nozzles on hoses, such as pistol grip sprayers.
5. Recommend parking on turf areas during car washing so that all runoff is beneficially used by plant material.
6. Recommend use of bucket and cloth/sponge to apply soaps and clean major portions of vehicle and use hose for final rinse only.

### **3.4.8 Fountains**

Decorative fountains shall be recycling and designed to reduce water losses through evaporation. Use of fountains is subject to additional demand management tools identified in Section 3.6.

### **3.4.9 Irrigation System Repair**

Operation of any irrigation system outside of its established watering schedule may be allowed for repairs or routine maintenance without incurring a violation under the following circumstances:

- A. *Residential:* The owner or operator of the system has notified the Utilities Department either by telephone (in person or by message) or in writing or by e-mail at least one (1) hour BEFORE operation of the system. Any operation of the system for longer than five (5) minutes per zone will be considered to be in violation of the watering schedule. An operator must be present at all times when the system is in operation for routine maintenance or repair purposes outside of its established watering schedule.
- B. *Non-residential:* The owner/responsible party/landscape contractor may post an "Irrigation System Check in Progress" sign in the immediate vicinity of the water use. Operation of the system shall be for routine maintenance (i.e. checking zones for broken heads, timer operation, etc.) and shall be limited to the briefest time to observe and detect malfunctions. Any operation of the system for longer than five (5) minutes per zone will be considered to be in violation of the watering schedule. An operator must be present and visible at all times when the system is in operation for routine maintenance or repair purposes outside of its established watering schedule.

### **3.4.10 Water Waste**



The following examples serve as illustrations of situations that shall be cited as violations of water waste prohibition. Similar situations as observed by water monitors will also be cited at their discretion:

- A. Continuous irrigation to any area resulting in ponding or pooling of water or in runoff water not absorbed into the ground or soil which flows away from the area being irrigated.
- B. Failure to repair any irrigation system that is leaking.
- C. Application of water intended for irrigation to an impervious surface, such as a street, sidewalk, or driveway, using potable water to wash down outdoor impermeable surfaces.
- D. Letting water run unrestricted from a hose or faucet to drainage.
- E. Operation of any irrigation system when demand management tools of section 3.6 of this policy have been invoked.

For water waste violations due to leaking or damaged irrigation components, the customer will be allowed a defined amount of time to repair the condition without incurring subsequent violations:

- Residential customers shall complete necessary repairs within seven (7) days of notification.
- Non-residential customers shall complete necessary repairs within two (2) days of notification.
- Public areas managed by the Town of Castle Rock Parks Department shall complete necessary repairs within twenty-four (24) hours.
- Notwithstanding the enforcement provisions set forth in Town Code, the Program Administrator may order a shut off of water service to property if the Program Administrator reasonably finds ~~that~~ an extreme waste of water is occurring on the property, with service charges for shut-off and turn-on of service applied to the account.

### **3.5 Enforcement**

The purpose of enforcement of the watering schedule is to maintain the integrity of the water system during peak demand usage to ensure ~~that~~ positive pressure exists and fire flow demands are met. This code enforcement is conducted to protect the interests of the public and protect public health and safety. As the focus of the program is encouragement of compliance, first violations are issued as warnings with no surcharges applied, and subsequent violations are on a graduating scale. Water monitors and all other Town of Castle Rock staff are authorized to issue violations, but also receive training in educating water customers about the purpose of the program with the intent to encourage compliance. Members of the public can submit affidavits of witness of out-of-compliance irrigation, upon which the Town may issue a violation.

#### **3.5.1 Monitors**

Water monitors are employed as part-time temporary positions during the water restriction period. Monitors are hired through standard Town of Castle Rock employment procedures. See the current iteration of the Personnel Guidelines, or contact the Human Resources Department.

Wages are budgeted through the Water Resources Enterprise Fund. Since the watering schedule is a demand management measure, it is not directly associated with the Water Conservation Program. Funds must be allocated at the identified wage for adequate coverage of the water system. Coverage may be required to include 24-hours, 7 days per week, and is dependent on water system conditions.



Water monitors drive throughout the Town and monitor water use, including irrigation and water waste. Water monitors will receive training during their first week of employment: 1) in customer service, public education 2) operation/care of Town equipment; 3) irrigation system operation training 4) information logging and violation processing; 5) safety training; and 6) to make inspections of soil preparation for new sod or seed installations that require an exemption to the watering schedule, as outlined in 3.3. The water monitor is first charged with personal safety, then with water schedule compliance. See Exhibit 9 for the water monitor training procedure and criteria.

Water monitors note date, time and type of watering schedule violation. Monitors note if personal contact was made with the customer and what level of public education took place, including distribution of schedules, and water conservation materials. Personal contact in issuance of violations of the watering schedule is encouraged if the owner is visually seen on the premises during the violation, and if the monitor feels safe in approaching the customer. Such personal contact is for the monitor's protection and is allowed during daylight hours only.

As necessary, water monitors may also be trained to inspect for adequate soil preparation as per the requirements for the watering schedule exemption permit for new seed or sod. As monitors inspect for these requirements, they may disseminate educational material for water customers regarding water conserving landscaping practices.

### **3.5.2 Evidence of Violation**

Violations of the regular and approved alternative watering schedules are violations of municipal code and are subject to surcharges and potential discontinuance of service for non-compliance. Violation issuance hierarchy is confined to the current irrigation year January through December and will not be carried over from one year to the next. New customers are not subject to pre-existing violations for that specific address.

The party issuing the affidavit must witness the violation. For example, the monitor must see the out of compliance irrigation or water waste.

Although not required by Municipal Code, monitors may take photographs and/or video of the violation, documenting date and time. Should the violation be appealed, this data may serve as additional evidence that the violation actually occurred, and may be supplied to the customer upon request.

### **3.5.3 Warning/Surcharge Issuance Process**

Violations that require surcharge issuance are copied daily to the Utility Billing section of the Utilities Department to apply to the appropriate utility billing account.

Violations are noted as legal documents ~~on notarized affidavit forms~~, **see** Exhibit 10. These forms are then processed on a daily basis, during regular business hours on standard forms that will be sent by U.S. Mail to:

- Owner/Responsible Party

- Occupant

Copies of violations may be sent at the Program Administrator's discretion to the landscape contractor at the contractor's expense.

Staff makes every attempt to notify responsible parties of non-compliance so that the situation may be corrected as soon as possible. It is, however not the Town's responsibility to notify any individuals not listed on the ~~Utility~~ **Water** Billing account information. At no time is bias applied in enforcement actions.

Although monitors or other Town staff document most violations, private parties may also fill out affidavits. Private parties may also contact Town staff to notify them that a violation is currently occurring. If staff is available, this may be immediately investigated and documented accordingly.

Due to the size, public exposure and potential negative impact to the water system of large, common and or public areas, responsible parties, i.e. landscape contractors, may be immediately notified through office, cell or pager numbers of the violation so the violation may be immediately addressed. This is accomplished during regular business hours. Should the violation be blatant and considered waste, a violation will be issued and the service may be discontinued until the contractor addresses and/or repairs the cause of the violation, i.e. leaking heads or zones going off at a non-approved time.

The warning/surcharge issuance process is as follows:

*\*Note:* All violations are processed and mailed to the aforementioned parties within 24 hours (during regular business hours) of the violation. Failure to do so however does not impact the validity of the enforcement action. Surcharges shall be applied to customer accounts within one week of the date of the violation.

#### **1st Violation – Warning, no surcharge incurred**

The enforcement form is processed with the appropriate violation and mailed, first class, to the appropriate parties. See Exhibit 11 for the sample letter mailed in case of warning issuance.

#### **2nd Violation – Surcharge**

The enforcement form is processed with the appropriate violation and mailed, first class, to the appropriate parties. Second violations will not be issued until five (5) business days following the mailing date of the first violation to allow the customer time to rectify the situation once they are notified of the problem.

#### **3rd Violation – Surcharge**

The enforcement form is processed with the appropriate violation and mailed, first class, to the appropriate parties. Third violations for customers will not be issued until five (5) business days following the mailing date of the second violation to allow the water customer time to rectify the situation upon notifications of the first and second violations.

#### **4th Violation – Surcharge**

The enforcement form is processed with the appropriate violation and mailed, and a copy is sent via U.S. Mail to the appropriate parties. Where possible and appropriate, the program administrator may attempt to notify the water customer by telephone.

### 5th Violation – Surcharge

The enforcement form is processed with the appropriate violation and mailed, via U.S. Mail with notice that irrigation service may be discontinued should non-compliance persist, and a copy is sent to the appropriate parties.

### Subsequent Violations

The enforcement form is processed with the appropriate violation and mailed, via U.S. Mail, with notice that irrigation service may be discontinued without immediate compliance, and a copy is sent to the appropriate parties.

Exhibit 12 is a copy of the enforcement form.

### 3.5.4 Surcharge Values

Per Chapter 13.15.050 of municipal code, surcharges may be issued against owners or responsible parties for watering schedule non-compliance. The Town reserves the ability to immediately terminate irrigation or other watering for due cause, and not to be reinstated until the system or use comes into compliance. Current policy guidelines outline the following charges to be applied to the appropriate utility billing account.

For common areas where water charges are paid for by the Town of Castle Rock, yet landscape management is accomplished by a private entity such as a district or homeowner's association, the private party that is managing the project is responsible for adhering to the criteria outlined in this policy and all charges incurred for non-compliance.

Public irrigated areas and facilities that are managed by the Town of Castle Rock Parks Department are not exempt from surcharge issuance and are subject to all levels of enforcement.

<u>Residential</u>	<u>Non-residential</u>
1 <sup>st</sup> – Warning, no surcharge	1 <sup>st</sup> – Warning, no surcharge
2 <sup>nd</sup> - \$25.00 surcharge	2 <sup>nd</sup> - \$50.00 surcharge
3 <sup>rd</sup> - \$50.00 surcharge	3 <sup>rd</sup> - \$100.00 surcharge
4 <sup>th</sup> - \$100.00 surcharge	4 <sup>th</sup> - \$200.00 surcharge
5 <sup>th</sup> - \$200.00 surcharge	5 <sup>th</sup> - \$400.00 surcharge
Subsequent - \$200.00 surcharge	Subsequent - \$400.00 surcharge
Subject to service discontinuance	Subject to service discontinuance

### 3.5.5 Appeal Process

The appeals process does not apply to warning issuance. Appeals of violations with associated surcharges may be brought before the program administrator in written form.

If a party believes that a surcharge has been assessed erroneously, the party may submit a letter of appeal. This appeal must be submitted, in writing, within 10 days of the mailing date of the violation notification to

the Water Use Management Program Manager. The appeal letter should include a thorough explanation of why the customer believes the surcharge is in error and any other reasons why the surcharge should be waived, and must include the following information:

- Specific violation in question including violation number, date and time.
- Reason for the infraction proving it to be outside of the control of the owner, or responsible party.
- Or why the party feels that the violation did not take place as identified on the violation notification.
- Requested action by the Town.
- Signature of owner and responsible party.

See Exhibit 13, the form for processing a surcharge waiver.

- Timing of Appeal Request:* Appeals must be received within 10 days of the mailing date of the violation notification. Any appeal received after that date will not be considered, and the associated surcharge will not be removed from the account.
- Timing of Response to Applicant:* The Town shall respond to the customer within 10 business days of receipt of an appeal request.
- Crediting Criteria:* Associated surcharges must be paid by the customer by the billing due date of their ~~utility~~ **water** bill. If the customer's appeal is approved, the related surcharge will be credited to their ~~utility~~ **water** billing account within the subsequent billing cycle.

Should the Water Use Management Program Administrator deny the appeal, the party may appeal to the ~~Utilities~~ Director of **Castle Rock Water**. Subsequent appeal requests may be reviewed by the Town Manager. As with other Code violations, ultimate authority over such cases lies in the Municipal Court system. Timing of appeal notifications shall be consistent with Chapter 13.14.080 of municipal code.

### 3.5.6 Appeal Approval Criteria

Appeals may be approved and subsequent surcharges may be waived based on the following standard criteria:

- Loss of Power: Loss of power to an automatic irrigation system due to area power outages. This type of appeal may only be used for a one-time appeal approval and may not be used for subsequent violations.
- Mechanical Failure: Evidence of a verifiable mechanical failure of programmable timer. This type of appeal may only be used for a one-time appeal approval and may not be used for subsequent violations.
- Post Office Error: Failure to receive the violation notification through U.S. Mail.
- Hardship: Demonstration of extreme hardship as approved by the Utilities Director.
- Special Condition: As deemed appropriate by Program Administrator.

Owners are responsible to ensure that their properties meet the watering use management regulations. When a homeowner is on vacation or otherwise unable to make this assurance, it is recommended that the owner designate a responsible party to oversee the property during their absence.

Irrigation during storm events is discouraged. Public, non-residential and common areas will be cited for wa-

ter waste under these circumstances, and shall have properly functioning moisture-sensing equipment on all systems.

### **3.5.7 Customer Assistance Programs**

The Town of Castle Rock offers the community various opportunities to conserve water. Please see [www.CRconserve.com](http://www.CRconserve.com) for current program information.

### **3.5.8 Consumption Restrictions**

At the discretion of the ~~Utilities~~ Director **of Castle Rock Water**, flow restriction devices may be placed on large irrigated area service connections to ensure consumption volumes do not exceed those identified on schedule submittals. These devices may be installed at the expense of the account holder and/or responsible party, to include cost of equipment and staff resources for installation.

## **3.6 Demand Management Tools**

**Castle Rock Water may implement one or more of the demand management tools shown below to avert loss of fire flows and/or positive water system pressures upon proper approval:**

~~Should circumstances require additional demand management tools to be put into place to avert loss of fire flows and/or positive water system pressures, the following demand management tools may be implemented upon proper approval:~~

### **3.6.1 Curtailment/Discontinuance of Public/Common Area Irrigation**

(As approved by the ~~Utilities~~ Director **of Castle Rock Water**)

### **3.6.2 Discontinuance of Line Flushing**

(As approved by the ~~Utilities~~ Director **of Castle Rock Water**)

### **3.6.3 Discontinuance of Bulk Water Sales**

(As approved by the ~~Utilities~~ Director **of Castle Rock Water**)

### **3.6.4 Alteration of Regular and Approved Alternative Irrigation Schedule**

(As determined by the ~~Utilities~~ Director **of Castle Rock Water**, Town Manager and Town Council)

- A. Curtail issuance of exemption permits for new seed/sod installation
- B. Further limiting times and dates of irrigation.
- C. Discontinuance of car washing, decorative fountains and **water used for entertainment.** ~~entertainment water use.~~
- D. Discontinuance of all exterior water usage, including irrigation.
- E. Discontinuance of all non-essential water usage.



## **Section 4. Database Management**

## **4.1 Database Management**

The water use management program information management system consists of several tools. These include:

- Alternative irrigation schedules and non-residential maintenance submittals shall be incorporated into a computer database that includes copies of all information mailed to each owner and/or responsible party, schedule application, approved schedule and all contract information.
- Exemption computer database that reflects all approved exemptions and cross-references, all account activity associated with enforcement.
- Enforcement computer database that reflects all warnings, surcharges, appeals and subsequent actions associated with property, inclusive of telephone and personal contacts.

Water use management program information is managed on a yearly basis. Alternative schedule requests and nonresidential maintenance submittals must be resubmitted and approved for each applicable irrigation season. Enforcement action is accomplished on an annual basis as well, and water waste enforcement occurs throughout the year.



## **Section 5. Landscape Professionals Maintenance**



## 5.1 Landscape Professionals – Maintenance

Irrigation of ~~non-residential large irrigated~~ areas not only creates a large volume demand on the water system, it is a high profile activity for the residents and business owners in the Town of Castle Rock. In the past, lack of program awareness and non-compliance of ~~non-residential large irrigated~~ areas have resulted in extensive amounts of staff involvement, large numbers of violations and surcharges, including service discontinuance, as well as large amounts of negative public feedback.

Compliance with the irrigation schedule requirements is necessary to:

- Maintain adequate water service volumes.
- Maintain positive public relations with the community.

Therefore it is necessary that the landscape professionals that maintain these properties be thoroughly aware of all operational criteria. In order to address these issues, non-residential irrigated areas shall be managed by Town of Castle Registered Landscape Professionals.

The registration process shall include the following:

- A. Attendance at an annual seminar; and
- B. Passing score (75% or better) on a test formatted to identify level of knowledge of the Water Use Management Program and Town of Castle Rock Landscape Regulations.  
(See Registration of Landscape Professional Form, Exhibit 14.)

The curriculum for the seminar shall include at a minimum:

1. Program intent and objectives.
2. Designation of non-residential irrigated areas.
3. Non-residential irrigated schedule parameters.
4. Acquire submittal requirements.
5. Enforcement parameters.
6. Demand management tools.
7. Related Landscape Regulation and Principles components.

Testing process shall be open-book and based on parameters that relate to each module of the seminar curriculum.



## **Section 6. Rain Water Collection**

## 6.1 Rain Barrels

On Aug. 10, 2016, it became legal to capture rainwater. According to Colorado law, homeowners can have two 55-gallon rain barrels to be used for irrigation purposes.

For more information, visit:

<http://water.state.co.us/SURFACEWATER/RAINWATERCOLLECTION/Pages/default.aspx>

A fact sheet is also included as Exhibit 16.

### FREQUENTLY ASKED QUESTIONS

#### **Who can collect water under this law?**

Any single family residence or multi-family residence with 4 or fewer units. Each home in a row of homes joined by common side walls, such as duplexes, triplexes, or townhomes, is considered a single family residence.

**Do I need a permit through the Division of Water Resources before I start collecting precipitation?** No permit or other approval is required for capture and use of precipitation in rain barrels with a combined storage capacity of 110 gallons in accordance with HB16-1005.

#### **Where can I collect the water from?**

From the roof of a building that is used primarily as a residence.

#### **How much water can I collect?**

You can fill and refill two rain barrels with a combined storage capacity up to 110 gallons throughout the year.

#### **What can I collect the water in?**

Water must be collected in rain barrels (up to 110 gallon total capacity) with sealable lids

#### **What can I use the water for?**

Outdoor uses, such as lawn and garden irrigation, on the property where the water was collected. Though the rainwater can legally be used for a variety of outdoor uses (car washing, livestock watering, hot tub filling, irrigation, etc.) rainwater users should evaluate the quality of the collected rainwater to ensure it is appropriate for the proposed outdoor use. The water cannot be used for drinking water or indoor household purposes.

**Will standing water in the rain barrels create a mosquito problem?** Rain barrels must have sealable lids to prevent insects or other pests from using the stored water.



## Appendices

Exhibit 1	Water Restriction Code – Chapter 13.15
Exhibit 2	Annual Review Recommendations/Issues List
Exhibit 3	Sample Water Schedule & Customer Letter
Exhibit 4	Sample Non-residential Communications
Exhibit 5	Non-residential Maintenance Submittal
Exhibit 6	Temporary Irrigation Exemption Application
Exhibit 7	Exemption Placard
Exhibit 8	Special Pressure Related Area Schedule
Exhibit 9	Water Monitor Training Guidelines
Exhibit 10	Violation Affidavit Form
Exhibit 11	Sample Warning Letter
Exhibit 12	Sample Subsequent Enforcement/Violation Notification
Exhibit 13	Request for Waiver Processing Form
Exhibit 14	Landscape Professional Qualifications Form
Exhibit 15	Soil/Irrigation Inspection Request
<b>Exhibit 16</b>	<b>Rain Collection Fact Sheet</b>

## **Exhibit 1**

### **Water Restriction Code - Chapter 13.15**

## Chapter 13.15 - Water Restrictions

### 13.15.010 - Definitions.

The following terms used in this Chapter are defined as follows:

*Irrigation season* means the period between May 1 and September 30, inclusive, of each year.

*Owner* means the person or entity who is the owner of the real property receiving utility services, as shown in the public records of the County Assessor; provided, however, that if title is held in representative capacity, or the right to possession, use and control of the property has been judicially vested in another party, such equitable owner(s) shall have the rights and responsibilities afforded and imposed by this Chapter.

*Program Administrator* means the Town Manager of the Town of Castle Rock, or his or her designee.

*Responsible party* means the person or group identified by the owner as such, including property manager or homeowner's association representative.

*Utility bill* means the periodic statement of utility charges issued in accordance with Section 13.14.040.

(Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

### 13.15.020 - Regulations.

The following regulations shall apply to the time and date for use of water for lawn and landscaping irrigation during the irrigation season:

- A. Permissible irrigation hours shall be dictated by the Program Administrator sixty (60) days prior to the onset of restrictions.
- B. In order to stagger the demand on the Town's water delivery system during the irrigation season, watering shall be restricted to every third day in accordance with the following procedure:
  1. Properties with an assignment address ending in digit zero (0) through three (3) is designated by a (□), digit four (4) through six (6) by a circle and digit seven (7) through nine (9) by a (◇).
  2. Those properties for which several taps, services and/or addresses exist, the appropriate designated schedule shall be determined by Town staff, no later than two (2) weeks prior to the onset of restrictions.
- C. Annually, not later than thirty (30) days prior to commencement of the irrigation season, the Program Administrator shall designate in writing the permissible watering days for each circle, square and diamond address, which shall be kept on file with the Town Clerk, posted in a conspicuous place at the Town's administrative offices and published at least twice in a newspaper of general circulation; provided however, that the failure to make such timely designation shall not impair the enforceability of the ordinance codified in this Chapter for violations occurring after the date such designation is made.

(Ord. 2000-10 § 1(part), 2000; Ord. 99-10 § 1, 1999; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

### 13.15.030 - Alternative schedules.

In the event the Program Administrator determines that a hardship/special circumstance exists for any owner, due to an irrigation requirement which cannot be met under the provisions of this Chapter, alternative schedules may be approved by the Program Administrator.

- A. The owner shall complete and file with the Town an application for such exemption. Such application shall contain the applicant's name, the address of the premises requiring the exemption, the reason and hardship requiring the exemption, the approximate square footage requiring irrigation and a description of the type and form of material requiring irrigation.
- B. If, upon review, the Program Administrator determines that granting of the exemption will not significantly impact the water system, the Program Administrator may issue an exemption certificate, stating appropriate conditions thereon, specifically including the effective date and the expiration date.
- C. An administrative fee for issuance of the permit, not to exceed twenty-five dollars (\$25.00), may be imposed.

(Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

#### 13.15.040 - Surcharges.

- A. Waste of potable water shall not be permitted. Waste is defined as applications of potable water which do not result in beneficial use of the water. Waste violations shall be those fines set forth in the Town's Water Use Management Plan in effect at the time of the use.
- B. Single-family surcharges are intended to reinforce the Town's conservation policies and discourage customers from consuming excessive amounts of water.
- C. Beginning January 1, 2017, a single-family customer (as defined in Section 13.12.111) using more than forty thousand (40,000) gallons of water in a billable month shall be assessed a surcharge as follows:

**Single-Family Surcharges**  
**Usage in excess of 40,000 gallons per billable month (\$ per 1,000 gallons)**

2017 and thereafter
\$8.29

The surcharge shall be in addition to the monthly charges for water set forth in Section 13.12.112.

( [Ord. No. 2016-030, § 18, 9-20-2016](#) ; [Ord. No. 2015-46, § 14, 11-3-2015](#) ; [Ord. No. 2014-31, § 11, 11-18-2014](#) ; Ord. 2013-34 § 12, 2013; Ord. 2012-30 § 9, 2012; Ord. 2011-31 § 7, 2011; Ord. 2010-34 § 8, 2010; Ord. 2009-32 § 3, 2009; Ord. 2009-22 § 1, 2009; Ord. 2007-43 § 1, 2007; Ord. 2004-37 § 1, 2004; Ord. 2000-10 § 1(part), 2000; Ord. 97-18 § 1(part), 1997; Ord. 93-5 § 2(part), 1993)

#### 13.15.050 - Enforcement.

- A. The owner or responsible party shall be responsible for compliance with the provisions of this Chapter and will be subject to surcharges for noncompliance. Surcharges for violations of Sections 13.15.020

and 13.15.030 shall be those surcharges set forth in the Town's Water Use Management Plan in effect at the time of the violation.

- B. The Town reserves the ability to immediately terminate irrigation or other wasting for due cause with the Program Administrator's approval, and not to be reinstated until the system or use comes into compliance with this Chapter.

(Ord. 2004-37 §2, 2004; Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

#### 13.15.060 - Appeals.

Appeals of such penalties may be brought before the Town Manager or such other person designated by the Town Manager to hear such appeals. The appeal process of Section 13.14.080 shall apply to such appeals.

(Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

#### 13.15.070 - Other actions authorized.

Nothing contained herein shall preclude the Town or its officials from pursuing further injunctive relief, requesting the court to issue a restraining order or injunction precluding an offender from further use of the Town's potable water system for outside irrigation, during the balance of the irrigation season.

(Ord. 2000-10 §1(part), 2000; Ord. 97-18 §1(part), 1997; Ord. 93-5 §2(part), 1993)

#### 13.15.080 - Restrictive covenants.

##### A. Definitions.

*Restrictive covenant* means any form of declaration of covenants, design guidelines, policies, conditions, restrictions or similar nongovernmental mechanisms for controlling land use on private property, including rules, regulations or guidelines implemented under the authority of restrictive covenants. Restrictive covenants shall not include any Town code or regulation.

*Turf or turf grass* means continuous plant coverage consisting of hybridized grasses that, when regularly mowed, form a dense growth of leaf blades and roots.

- B. No person shall enforce or seek to enforce any provision contained in any restrictive covenant that has the effect of requiring that an area of any lot, or any minimum percentage of a lot, be landscaped with turf grass. However, this prohibition shall not preclude the enforcement of restrictive covenants requiring the watering and regular maintenance of turf grass.
- C. Any person who violates Subsection 13.15.080.B shall be punished by a fine of not more than one thousand dollars (\$1,000.00). Each such person shall be guilty of a separate offense for each and every day during any portion of which any violation is committed, continued or permitted by any such person.
- D. Any new restrictive covenant that prohibits or limits the installation or use of drought-tolerant vegetative landscapes is prohibited.

(Ord. 2004-57 §1, 2004)



## **Exhibit 2**

### **Annual Review Recommendations / Issues List *(if applicable)***

This section reserved for notes, etc. for WUMP update (if applicable)

## **Exhibit 3**

### **Sample Water Schedule and Customer Letter**



**Castle Rock residents have proven their commitment to water conservation. Together, over the last several years, we have reduced our water use by 20 percent.**

### **What does that mean to you?**

In the past, wise water use was something everyone could do. For our future, it's what everyone must do. No matter where you live, using water more efficiently helps Castle Rock become a more sustainable community. It's simple. It's smart. The small, everyday decisions you make can add up to enormous water savings.

### **Leave a sufficient legacy.**

Saving water today is key to securing water for our future. Water used for outdoor landscaping accounts for the largest demand on the water system during the spring and summer.

### ***Enclosed is the watering schedule, effective June 1 through Aug. 30.***

If you are a residential customer, watering is allowed on your designated day before 8 a.m. and after 8 p.m. During these hours, there is a reduction in solar radiation, temperatures, and winds. All of which allow you to take advantage of watering when it is most effective. Watering during these times has been shown to reduce (20-50 percent) water loss from evaporation.

There are no changes affecting nonresidential customers - watering is still allowed on your designated day from 10 p.m. to 5 a.m.

All customers follow square, circle, or diamond.

If your address ends in:

- 0, 1, 2 or 3, a square designates your watering days
- 4, 5 or 6, a circle designates your watering days
- 7, 8 or 9, a diamond designates your watering days

### **Are you planning to install a new lawn? Apply on-line at [CRgov.com/exemption!](http://CRgov.com/exemption!)**

If you're planning new landscape, you'll want to get a temporary irrigation permit. A permit is recommended any time you are installing or renovating your lawn or landscape, regardless of the time of year. This permit does not give you any more water just more time to apply the water. Daily watering is allowed up to 30 consecutive days for new turf and up to 45 consecutive days for seed or other plant material. Watering is not permitted between 8 a.m. and 8 p.m., even with a permit. **Remember, you will be charged for the water used based on your individual water budget, so water wisely!**

### **Visit [CRconserve.com](http://CRconserve.com)**

It's an easy, interactive way to learn about water conservation. Create an account, sign in and see your watering schedule; display weather data specific to your location; and create a xeric plant shopping list, which you can print and take with you to a local nursery.





# WATERING SCHEDULE

*All water customers follow circle, diamond or square.*

*Certain streets in Founders Village have a special schedule.*

- If your address ends in 0, 1, 2 or 3, a square designates your watering days.
- If your address ends in 4, 5 or 6, a circle designates your watering days.
- ◆ If your address ends in 7, 8 or 9, a diamond designates your watering days.



Smartscape solutions for your lawn and home.

## JUNE

Sun	Mon	Tues	Wed	Thur	Fri	Sat

## JULY

Sun	Mon	Tues	Wed	Thur	Fri	Sat

## AUGUST

Sun	Mon	Tues	Wed	Thur	Fri	Sat

Visit [CRconserve.com](http://CRconserve.com) for Castle Rock conservation and irrigation tips.

## **Exhibit 4**

### **Sample Non-residential Communications**



## REPRESENTATIVE SAMPLE

(date)

Dear Property Owner/Manager:

Our records indicate that the property or properties you manage or own within the Town of Castle Rock are considered nonresidential in accordance to the Town of Castle Rock Water Use Management Plan. Therefore, your property or properties must submit a Nonresidential Maintenance Submittal and be maintained by a Town of Castle Rock registered Maintenance Contractor.

The Town of Castle Rock is working hard to uphold its Water Use Management Plan, which outlines seasonal irrigation parameters for all water customers.

Enclosed you will find a Nonresidential Maintenance Submittal. Please take the time to fill this out and forward it on to your Certified Landscape Contractor. ***Submittals shall be received within ten (10) days of system activation; and no later than April 30 each year.*** Classes are being held to register contractors. Visit [CRconserve.com](http://CRconserve.com) for class dates. Reservations are required, so please call 720-733-6017 to reserve your spot.

For more information about specific regulations associated with the Water Use Management Plan, please contact me or visit our website at [CRgov.com](http://CRgov.com).

Also, please note there are many changes in our landscaping regulations that may directly impact your property. Castle Rock's *Landscape and Irrigation Performance Standards and Criteria Manual* (Criteria Manual) were adopted in December 2012; and subsequently updated in 2015. The purpose of the Criteria Manual is to create a community culture that embraces water efficiency and smart watering practices, xeric design and efficient irrigation techniques which will save the Town and it's ratepayers millions of dollars in the infrastructure, help stabilize future rate increases, protect the investments of the property owners and, most importantly, extend the life of the Town's aquifers. These Criteria Manual greatly influences all new installations. Please contact me if you are installing any new areas or are renovating any landscaped areas.

We look forward to working with you through the irrigation season. If you have any questions or concerns, please contact me at 720-733-6017.

Sincerely,

(name)

## **Exhibit 5**

### **Nonresidential Maintenance Submittal**



**TOWN OF CASTLE ROCK**  
**NON-RESIDENTIAL MAINTENANCE SUBMITTAL**

**Submittal information shall be received within ten (10) days of  
system activation; and no later than April 30 each year.**

Submittals will be processed through:

Castle Rock Water  
175 Kellogg Court, Castle Rock, CO 80109  
Phone: 720-733-6000 Fax: 303-688-0437  
E-Mail: [waterconservation@crgov.com](mailto:waterconservation@crgov.com)

Property Name or Business Name: \_\_\_\_\_

Property Owner: \_\_\_\_\_

Management Company / Owner's Representative: \_\_\_\_\_

Community Manager: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Water Service Address: \_\_\_\_\_

Water Account Number: \_\_\_\_\_

***Property Owner/Owner's Representative / Community Manager***

I verify that the identified maintenance contractor shall operate the irrigation system for this property in accordance with the Town of Castle Rock Water Use Management Plan, and the approved schedule. I agree that the enclosed information is complete and accurate. I understand that charges for non-compliance, Castle Rock Water services and other charges may be assessed against the designated water billing account for the property, and are subject to the Regulations identified in the Town of Castle Rock Municipal Code, including, but not limited to Chapters 13.14 and 13.15.

\_\_\_\_\_  
Signature of Responsible Party

\_\_\_\_\_  
Date

**Exhibit 6**

**Residential Temporary Irrigation Exemption Application**



## Nonresidential Temporary Irrigation Exemption Application

Name: \_\_\_\_\_ Date of Application Submittal: \_\_\_\_\_

Address of Property Requesting Exemption: \_\_\_\_\_

Landscape Company: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Subdivision Name: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_ Phone: \_\_\_\_\_

Property Owner / Responsible HOA: \_\_\_\_\_ Account #: \_\_\_\_\_

### Reason for exemption request:

\_\_\_\_\_ New Seed/Sod/Other Plant Material (circle applicable request/s)

Installation Date: \_\_\_\_\_

Total Square Footage: \_\_\_\_\_ Sod Allowance sq. ft.: \_\_\_\_\_

Type of sod used: \_\_\_\_\_ Tilled to a depth of: \_\_\_\_\_

TCR Soil Inspection Date: \_\_\_\_\_ TCR Irrigation #: \_\_\_\_\_

Soil Preparation Materials: \_\_\_\_\_ Affidavits Provided: \_\_\_\_\_

\_\_\_\_\_ Hydro-seed installation (Requires Special Schedule Submittal)

\_\_\_\_\_ Other (explain) \_\_\_\_\_

### **For Office Use Only**

Duration of Exemption: \_\_\_\_\_

(30 days for new sod, 45 for new seed)

From: \_\_\_\_\_ To: \_\_\_\_\_

Installation Inspection Date: \_\_\_\_\_

Initial of Inspector: \_\_\_\_\_

- ☐ Use the back of this sheet to outline the areas requiring temporary exemptions.

**I understand that this is a temporary exemption that allows daily watering for the identified property and locations, between the standard schedule hours of 11 p.m. to 4 a.m. for the identified duration of the permit. I acknowledge that by signing this I understand the Water Use Management Plan and will abide by all watering restrictions.**

Applicant Signature \_\_\_\_\_ Date \_\_\_\_\_

Property Owner or Responsible Party \_\_\_\_\_ Date \_\_\_\_\_



## Residential Temporary Irrigation Exemption Application

Please complete the form below to apply for a temporary irrigation exemption. The exemption period for new sod is up to 30 days and seed or other plant materials up to 45 days from the date of installation. You will receive your placard within five (5) business days.

Address of Property Requiring Exemption \_\_\_\_\_

Name: \_\_\_\_\_

Phone #: \_\_\_\_\_ Email Address: \_\_\_\_\_

Mailing Address (if different): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Reason for exemption request: ☐ New sod ☐ New Seed ☐ Other plant materials (e.g. shrubs, trees)

Location: ☐ Front ☐ Back ☐ Side

Type of soil preparation materials used. This material should be tilled to a minimum 6" depth.

Automatic sprinkler system: ☐ Yes ☐ No Builder/developer installation: ☐ Yes ☐ No

If builder/developer installed, please list Building/Irrigation Permit #: \_\_\_\_\_

Backflow prevention test date (if applicable): \_\_\_\_\_

### Conditions of irrigation exemption:

- Daily watering is allowed for the identified property and locations, before 8 a.m. and after 8 p.m. No day-time watering is permitted between the hours of 8 a.m. and 8 p.m.
- After exemption period ends, all applicable restrictions currently in place will be followed.
- Placard shall be posted in a location clearly visible from the street.
- Amount of my monthly water budget will not be increased during the exemption period.
- Tier 4 Conservation Surcharges will not apply during the exemption period.

Signature \_\_\_\_\_

Date \_\_\_\_\_

*For office use only*

Effective dates of irrigation exemption From \_\_\_\_\_ to \_\_\_\_\_

## **Exhibit 7**

### **Exemption Placard**



# TEMPORARY IRRIGATION EXEMPTION

Address/Location: \_\_\_\_\_

**WATERING HOURS**  
Residential before 8 a.m. or after 8 p.m.    Nonresidential 10 p.m. - 5 a.m.

Daily irrigation is allowed for the property and location as described in the exemption application. This placard shall be posted in a location which is clearly visible from the street. Upon expiration of the exemption, please follow all restrictions currently in place. This exemption will not increase the amount of your monthly water budget. Tier 4 Conservation Surcharges will not apply during the exemption period only. Water waste is not allowed during the exemption period, and may be subject to a violation.



*NOTICE: This exemption is issued pursuant to the provisions of Chapter 13.15 of the Municipal Code of the Town of Castle Rock, and is subject to revocation should conditions require.*

Approved: \_\_\_\_\_  
*Authorized Staff Signature*

Date: \_\_\_\_\_

## **Exhibit 8**

### **Special Pressure Related Area Schedule - Founders Village**

## Founders Area Water Day Symbols for Water Restriction

*Locate your address and note the assigned symbol which denotes your “new” watering day.*

### **Aspen Avenue**

5200 = square  
5220 = circle  
5240 = diamond  
5241 = diamond  
5260 = square  
5261 = circle  
5280 = circle  
5281 = square  
5300 = diamond  
5301 = diamond  
5320 = square  
5321 = circle  
5340 = circle  
5341 = square  
5360 = diamond  
5361 = diamond  
5380 = square  
5400 = circle  
5401 = circle

### **Bristol Street**

15 = circle  
24 = circle  
25 = square  
34 = square  
35 = diamond  
44 = diamond  
45 = circle  
55 = square  
75 = diamond  
95 = circle  
104 = diamond  
105 = square  
124 = circle  
135 = diamond  
144 = square  
165 = circle  
174 = diamond  
194 = circle  
195 = square  
205 = diamond  
214 = square  
215 = circle  
235 = square  
244 = diamond  
245 = diamond  
255 = circle

### **Cherry Street**

156 = circle  
157 = square  
176 = diamond  
177 = circle  
192 = square  
197 = diamond  
216 = circle  
217 = square  
236 = diamond  
237 = circle  
256 = square  
257 = diamond  
267 = square  
276 = circle  
277 = circle  
296 = diamond  
297 = diamond  
306 = square  
307 = square  
326 = circle  
327 = circle  
346 = diamond  
347 = diamond  
367 = square

### **S. Carlton Street**

815 = diamond  
833 = square

### **E. Hamilton Ave**

5126 = square  
5146 = circle  
5166 = diamond  
5186 = square  
5206 = circle  
5216 = diamond  
5226 = square  
5236 = circle  
5246 = diamond  
5256 = square  
5266 = circle  
5276 = diamond  
5286 = square  
5296 = circle  
5306 = diamond  
5326 = square  
5346 = circle  
5366 = diamond  
5386 = square

### **Holcomb Street**

5250 = square  
5251 = square  
5270 = diamond  
5271 = diamond  
5290 = circle  
5291 = circle  
5300 = square  
5301 = diamond  
5320 = diamond  
5321 = diamond  
5340 = circle  
5341 = circle  
5360 = square  
5361 = square

### **N. Holcomb St.**

110 = circle

### **E. Howe Street**

5256 = square  
5259 = diamond  
5276 = diamond  
5279 = circle  
5296 = circle  
5306 = square  
5326 = diamond  
5329 = circle  
5346 = circle  
5349 = square  
5366 = square

### **E. Kensington Ave**

5221 = square  
5233 = circle  
5245 = diamond  
5257 = circle  
5260 = square  
5269 = diamond  
5270 = circle  
5290 = diamond  
5293 = circle  
5305 = diamond  
5310 = square  
5317 = square  
5329 = diamond  
5330 = circle  
5341 = circle  
5350 = diamond  
5351 = square  
5370 = square  
5371 = circle  
5390 = circle  
5391 = diamond

**More addresses**





**Founders Area Water Day Symbols  
for Water Restriction  
Page 2 of 2**

**E. Manchester Dr**

5349 = diamond  
5359 = circle  
5379 = square  
5389 = diamond  
5407 = circle

**Ponderosa St**

154 = diamond  
155 = square  
174 = square  
175 = circle  
194 = circle  
195 = diamond  
214 = diamond  
215 = square  
234 = square  
235 = circle  
254 = circle  
255 = diamond  
274 = diamond  
275 = square  
285 = circle  
295 = diamond

**Spruce Avenue**

5238 = diamond  
5248 = circle  
5257 = square  
5258 = square  
5267 = diamond  
5277 = circle  
5287 = square  
5297 = diamond  
5317 = circle  
5337 = diamond  
5338 = diamond  
5357 = square  
5358 = circle  
5377 = diamond  
5397 = square  
5441 = diamond  
5461 = circle  
5462 = diamond  
5481 = square  
5482 = square  
5501 = diamond  
5502 = circle  
5521 = circle  
5532 = diamond  
5541 = square  
5561 = diamond  
5581 = square

**Sandpiper Ave.**

5242 = circle  
5243 = square  
5262 = diamond  
5263 = diamond  
5282 = square  
5283 = circle  
5302 = circle  
5303 = square  
5322 = diamond  
5323 = diamond  
5342 = square  
5343 = circle  
5362 = circle  
5363 = square  
5333 = square  
5343 = diamond  
5353 = circle  
5363 = square  
5373 = diamond  
5383 = circle  
5393 = square  
5354 = circle  
5374 = square  
5394 = circle

**E. Weston Ave.**

**Willow Court**

5284 = circle  
5304 = diamond  
5305 = square  
5324 = square  
5325 = diamond  
5344 = circle  
5345 = circle  
5364 = diamond  
5365 = square

**Willow Street**

34 = square  
54 = diamond  
74 = circle  
94 = square  
114 = diamond  
134 = circle  
174 = square  
194 = diamond  
214 = circle  
234 = square  
254 = diamond  
274 = circle  
294 = square  
314 = diamond  
334 = circle  
344 = square  
364 = diamond  
374 = circle  
394 = square

(date)

**RE: FOUNDERS VILLAGE SPECIAL SCHEDULE AREA**

This year's Watering Schedule for the Town of Castle Rock was mailed to you during the first week of May. As many of you long-time Founders area residents know, each year you receive a "special watering schedule" assignment for your address.

The addresses in your area end in similar numbers, so the normal assignment, as indicated by the last digit in your address, could create low pressure problems if watering is done on the same day. As we have done in the past, your watering day symbol has been assigned to an alternate watering day.

Please locate your address on the enclosed list and note the "special" assignment. Irrigation is allowed on the day that corresponds to the assigned symbol as shown on the attachment.

Watering is allowed on your assigned day before 8 a.m. and after 8 p.m. when watering is more efficient because of reduced evaporation, cooler temperatures and less winds. These hours will help you take advantage of watering when it is most effective.

Thank you for your cooperation. If you have any questions regarding this special schedule, please contact us at 720-733-6017.

Sincerely,



Rick Schultz  
Water Conservation Specialist

RS:csr

**Exhibit 9**

**Water Monitor Training Guidelines**

# **WATER MONITOR TRAINING**

## Program Background

- Water resource information
- Program history
- Overview of implementation policy contents

## General Employee Information

- Personnel guideline distribution
- Employee identification (attire, identification card)
- Care of Town equipment (radios/flash lights/video/photo equipment/etc.)
- Use of Town vehicles
- Interaction with other Town employees

## General Duties

- Public education
- Violation logging
- Soil preparation inspections

## Safety

- Vehicle operation
- Driving hazards
- Friendly customer contact
- Hostile customer contact procedures
- Police contacts

## Customer Service/Public Outreach

- Logging customer issues and concerns for management review
- Calendar dissemination
- Xeriscape/water conserving landscaping information
- Automatic sprinkler system operation
- General water conservation information
- Rebate program information
- Current newsletters and publications
- "Frequently asked questions" pamphlets
- Situational customer service role playing training
- Supervisory referrals

## Information/Data Management

- Logging all customer contacts
- Logging of violations
- Affidavit completion
- Violation/paperwork processing timing

## Irrigation System Training

- Identification of automatic system components
- Use of hoses
- Timer and system checks

## Soil Preparation Inspections

- Soil preparation organic material components
- Depth specifications

### Types of Irrigation Schedules

- Regular residential and nonresidential areas
- Alternative/special schedules
- Exemptions

### Exemptions

- How to obtain
- Reasons to obtain (new plant material, disease mitigation, fertilization, hydro-seeding)
- Placard display and information
- Delivery of placards

### Special Water Uses

- Low pressure areas (Founders special schedule)
- Master metered properties
- Hand watering
- Water for entertainment
- Pressure washing
- Street washing
- Car washing
- Fountains
- Irrigation system repair
- Water waste criteria

### Nonresidential Areas/Special Schedules

- Town managed properties
- HOA/District managed properties
- Individual schedule components
- Responsible parties/maintenance contractors and contacts
- Levels of out-of-compliance irrigation/subsequent violations

### Violation Processing

- Warnings
- Surcharges
- Discontinuance of water service criteria
- Appeals process
- Preparation Inspection Procedure

### Minimum Soil Preparation Requirements

- 4 cubic yards of organic material per 1,000 square foot of turf area
- Tilled to a minimum depth of 6-inches

### Additional Recommendation

- Perform soil analysis to determine best organic material composition
- Apply localized fertilizer conducive to plant establishment needs
- Till organic material to a depth of 6 to 12-inches

### Inspection Procedure

- Note date/time of inspection (on exemption application when appropriate)
- Obtain receipts for verification of organic material, type and quantity
- Note square footage
- Note depth of tilling in at least four different areas of the turf and pulling back the sod and inserting screwdriver into the soil until resistance is noted. Note the depth.

**Exhibit 10**

**Violation Affidavit Form**



'Be Water Wise'

**SAMPLE**  
**Watering Schedule**  
**Violation Affidavit**

*(actual violation is recorded electronically)*

I, \_\_\_\_\_

☐ Reside at \_\_\_\_\_

☐ Town of Castle Rock employee,

swear or affirm that I observed the following apparent violation(s) of the Castle Rock watering restrictions:

**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_

**SUBDIVISION:** \_\_\_\_\_

**DATE/TIME:** \_\_\_\_\_ Date \_\_\_\_\_ Time (a.m./p.m.)

**NATURE OF VIOLATION:** ☐ Day ☐ Time ☐ Waste (explain) \_\_\_\_\_

**LOCATION / SOURCE OF VIOLATION:**

☐ Front

☐ Side

☐ Back

☐ Automatic Irrigation System

☐ Hose & sprinkler

☐ Other (explain)

*(Office use only)*

**IDENTITY OF VIOLATOR:** \_\_\_\_\_

Account Number: \_\_\_\_\_

Owner (as listed in Utility Billing): \_\_\_\_\_

Address: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_

Affiant

Date

\_\_\_\_\_

\_\_\_\_\_

## **Exhibit 11**

### **Sample Warning Letter**



Date:

Time:

Account #

Efficient water use is part of living in Castle Rock's semi-arid, high desert climate where every drop of water counts - whether it's pumped fresh from a well or saved through reduced lawn watering.

Wise water use is something we value at the Town. It's the small, everyday decisions that add up to long term water savings.

We observed at your location, the following:

---

This year's watering schedule was distributed by mail at the beginning of the irrigation season. For additional copies or tips on how to conserve, visit [CRconserve.com](http://CRconserve.com).

Your cooperation is greatly appreciated.

Castle Rock Water 175 Kellogg Ct., Castle Rock, CO 80109  
Questions? Call 720-733-6017



## **Exhibit 12**

### **Sample Subsequent Enforcement / Violation Notification**

Date: Time: Account #

Address: \_\_\_\_\_

Location: \_\_\_\_\_

Please be advised the above information constitutes a violation of the *Town of Castle Rock Municipal Code Chapter 13.15: Water Restrictions*. The information below indicates the amount your water bill will be surcharged. Subsequent violations will result in additional enforcement actions, including surcharges and potential termination of water service.

Water Violation Number \_\_\_\_\_

Surcharge Amount \$\_\_\_\_\_

Requests for appeal must be received in writing at the address shown below within ten business days of the date of this notice.

(per *Town of Castle Rock Municipal Code Chapter 13.14.080*)

Castle Rock Water 175 Kellogg Ct., Castle Rock, CO 80109  
Questions? Call 720-733-6017



## **Exhibit 13**

### **Request for Waiver Processing Form**

## WATERING RESTRICTION VIOLATION APPEAL PROCESSING FORM

Date Initial Request Received: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Violation Waiver Request:    Date: \_\_\_\_\_    1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup>/4<sup>th</sup>/Subsequent

Type of Violation:    \_\_\_\_\_ Date    \_\_\_\_\_ Time    \_\_\_\_\_ Waste    \_\_\_\_\_ Other

Number of Violations at above address (including current request): \_\_\_\_\_

### WAIVER REQUEST INFORMATION:

	<u><b>YES</b></u>	<u><b>NO</b></u>	
Request Received within 10 days:	_____	_____	
Type of Request:      Power Interruption	_____	_____	
Mechanical malfunction (Controller/valves/other)	_____	_____	
Previous violations waived:	_____	_____	Reason: _____
Other: _____			
_____			

### STAFF RECOMMENDATION:

Water Conservation Specialist:	_____ Approve Request	_____ Disapprove Request
Program Analyst:	_____ Approve Request	_____ Disapprove Request
Director:	_____ Approve Request	_____ Disapprove Request

### NOTIFICATIONS:

Receipt of Request to Applicant:    Yes/No (circle)    Date: \_\_\_\_\_

Approval/Denial (circle one) Decision to Applicant - Date: \_\_\_\_\_

*If Approved:*

Approval/Waiver Amount sent to Customer Billing - Date: \_\_\_\_\_



(DATE)

(NAME)

(ADDRESS)

(TOWN ADDRESS)

**RE: Water Use Management Plan Violation Appeal Request**

Dear \_\_\_\_\_;

Castle Rock Water is in receipt of your request to waive the recent water restriction program violation. Your initial request has been received within the necessary 10-day processing period. Review of your request is underway, and you will be notified of the decision regarding your request as soon as possible.

Please be aware that surcharge amounts associated with the violation in question may be applied to your utility billing account. Pending a decision regarding the waiver request, associated surcharges are due at the same time as charges for water/wastewater services. Failure to pay your utility statement in full will result in late charges. Should your request for waiver be granted, only associated surcharge value will be credited to your account within one week of the decision. Incurred late charges would not be credited.

Thank you for your attention to this matter. If you have any questions regarding the processing of your request, please feel free to contact me at 720-733-6000.

Sincerely,

Name

Water Conservation Specialist

**Exhibit 14**

**Landscape Professionals Qualifications Form**

## ***Property Maintenance Contractor***

Maintenance Company: \_\_\_\_\_

Contractor Name for Property: \_\_\_\_\_ TCR Registration #: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Office Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

I verify that I and/or my company employees shall operate the irrigation system for this property in accordance with the Town of Castle Rock Water Use Management Plan, and the approved schedule. I agree that the enclosed information is complete and accurate. I understand that it is unlawful to access Town of Castle Rock property, including metering equipment, meter pits, meters, main line equipment, etc. I understand that unauthorized access, and/or damage to Town property are prosecutable offenses according to Town of Castle Rock Municipal Code.

\_\_\_\_\_  
Signature of Maintenance Contractor

\_\_\_\_\_  
Date

### **Required Submittal Information:**

- I. Designated Area Map or Site Plan, including:
  - ☐ Map/site plan showing all irrigated areas.
  - ☐ Street names.
  - ☐ Meter locations and sizes (with account numbers.)
  - ☐ Backflow prevention assembly locations and sizes. (A passing backflow prevention assembly test report must be submitted to Town of Castle Rock within ten (10) days of system activation.)
2. Irrigation System Information, including
  - ☐ Traditional Controller:    Make \_\_\_\_\_                      Model \_\_\_\_\_
  - ☐ Smart Controller            Make \_\_\_\_\_                      Model \_\_\_\_\_
  - ☐ Confirm rain sensor installed and operational.
3. Maximum Seasonal Water Application Information (show peak water use)
  - ☐ Verify that you will be able to stay within the Town of Castle Rock watering schedule. (Maximum seasonal supplemental irrigation application rate in inches.)
  - ☐ What are the designated days and hours of irrigation?
  - ☐ Attach Town of Castle Rock Irrigation Chart for each controller.
4. Maintenance Contractor Information
  - ☐ Town of Castle Rock certification number and copy of certificate.
  - ☐ Standard system check schedule.
  - ☐ Standard malfunction response time.





## Landscape Professionals Registration

Date: \_\_\_\_\_

Registrant's Name: \_\_\_\_\_

Choose all types of registrations that apply:

☐ Maintenance    ☐ Design    ☐ Installation    ☐ Irrigation Design

☐ State of Colorado Landscape Architects License Number: \_\_\_\_\_

(Email copy to [waterconservation@crgov.com](mailto:waterconservation@crgov.com) )

☐ Renewal

As a Town of Castle Rock registered landscape professional, I certify that I am qualified to design, install, and/or maintain commercial and/or large irrigated areas and acknowledge that it is my responsibility to stay current on all policies and procedures identified in the Water Use Management Plan (WUMP) and the Landscape and Irrigation Performance Standards and Criteria Manual.

☐ New

Copies of the Water Use Management Plan (WUMP) and the Landscape and Irrigation Performance Standards and Criteria Manual will be provided to you at your first registration workshop.

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Cell Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

## **Exhibit 15**

### **Landscape, Soil and Soil Inspection Request**



## Landscape, Soil and Irrigation Inspection Application

*All contractors are required to pass a soil inspection prior to being approved for an irrigation exemption. To schedule an inspection, please complete the form below. An inspection will be performed within three (3) business days of submitting this request. Please do NOT call to check on the results of your inspection. Once the inspection has been completed, results will be placed on the front window of the property. Additionally, inspection results will be entered in CRW TrakIt and made available to registered contractors.*

### Inspection Address

Landscape Contractor Business Name: \_\_\_\_\_

Contractor Contact Name: \_\_\_\_\_

Contractor Registration # \_\_\_\_\_

Contractor Telephone Number

(best number to reach you at during business hours): \_\_\_\_\_

Contractor Email: \_\_\_\_\_

Email Address of Property Owner: \_\_\_\_\_

Castle Rock Water  
Stormwater Division  
175 Kellogg Ct.  
Castle Rock, CO 80109

**Exhibit 16**

**Rainwater Collection Fact Sheet**

# Rainwater Collection in Colorado

Fact Sheet No. 6.707

Natural Resources Series | **Water**

by P.E. Cabot, C.C. Olson, R.M. Waskom and K.G. Rein\*

The purpose of this factsheet is to provide information about the regulatory and health aspects of rainwater collection in Colorado. The information provided in this factsheet is based primarily on language in Colorado House Bill 16-1005 and is intended to inform citizens on how to properly use rain barrels in accordance with Colorado law.

## What is Rainwater Collection?

Rainwater collection, also called rainwater “harvesting,” is the process of capturing, storing and directing rainwater runoff and putting it to use. Water from roof gutter downspouts is usually directed onto landscaped areas and is incidentally consumed by plants, but this form of use is not regarded as rainwater harvesting.

Actual rainwater harvesting involves the collection of rainfall runoff from rooftops, concrete patios, driveways and other impervious surfaces. Rainwater collection systems vary from the simple and inexpensive to the complex and costly. Typically, rooftop rainwater collection systems are simple, consisting of gutters, downspouts, and storage containers. Inexpensive rainwater storage systems commonly make use of an above ground container such as a barrel or plastic tank with a lid to reduce evaporation and bar access for mosquitos to breed. Any container capable of collecting the rain shedding from a roof or patio can be used as a rainwater harvesting system, but to be in conformance with Colorado water law, the container additionally must be equipped with a sealable lid. More sophisticated systems have “first flush” diverters that are recommended to exclude capture of the initial rain that might carry impurities from the roof.

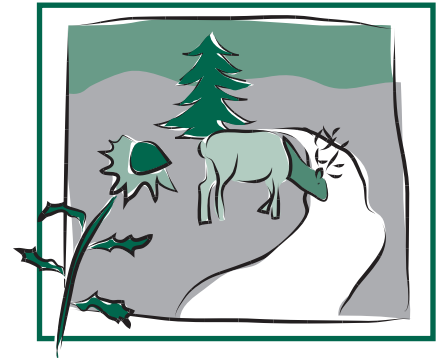
\*P.E. Cabot, Research Scientist, Extension and Colorado Water Institute, Colorado State University, C.C. Olson, Research Associate, Dept. of Civil and Environmental Engineering, Colorado State University, R. M. Waskom, Director, Colorado Water Institute, Colorado State University, K.G. Rein, Deputy State Engineer, Colorado Division of Water Resources, 4/2016

## Water Rights Issues Concerning Rainwater Collection

Colorado residents should understand that water rights in Colorado are unique compared to other parts of the country. The use of water in this state and other western states is governed by what is known as the prior appropriation doctrine. This doctrine of water allocation controls who uses water, how much water may be used, the types of uses allowed, and when those waters can be used. A simplified way to explain this system is often referred to as the priority system or “first in time, first in right.” It may seem strange that rainwater harvesting in Colorado is so carefully watched, but understanding why this is so can provide valuable insight into the way water is shared in Colorado. In our arid environment, every drop counts and water rights holders depend upon the runoff from snowmelt and rainfall to supply the beneficial uses to which they apply their water rights. Captured precipitation that is consumed “out of priority” may deprive downstream and/or senior water right holders of their right to use water from the natural stream, which comprises water that originates as snow and rain. Even though the detention of rooftop precipitation might only be temporary and minimal, it may still alter the nature of historic flow patterns.

## How to Use Rain Barrels Legally in Colorado

In order to safeguard senior holders of Colorado water rights, diverting and storing water is allowed only during times when all water rights in the basin are satisfied. It is impractical, however, for homeowners to know at all times whether water rights are satisfied. To collect rainwater without regard for other water rights, there are two laws which establish allowances for the limited collection of rainwater from rooftops of residential dwellings. These laws are further



## Quick Facts

- Most homeowners in Colorado are now allowed to use rain barrels to collect rainwater.
- A maximum of two rain barrels with a combined storage of 110 gallons or less are allowed at each household.
- Collected rainwater may be used to irrigate outdoor lawns, plants or gardens.
- Untreated rainwater collected from roofs is not safe to drink.

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described below. Prior to the passage of House Bill 16-1005, in particular, rainwater collection was not permitted except under specific circumstances.

There are several restrictions that are important to follow in order to use rain barrels legally in Colorado. These restrictions differ depending on your residential situation.

## Rain barrel use under HB16-1005

Under House Bill 16-1005, rain barrels can only be installed at single-family households and multi-family households with four (4) or fewer units. A maximum of two (2) rain barrels can be used at each household and the combined storage of the 2 rain barrels cannot exceed 110 gallons. Rain barrels can only be used to capture rainwater from rooftop downspouts and the captured rainwater must be used on the same property from which the rainwater was captured, for only outdoor purposes, including to water outdoor lawns, plants and/or gardens. Rain barrel water cannot be used for drinking or other indoor water uses.

It is important for rain barrel users to understand that the capture and use of rainwater using rain barrels does not constitute a water right. HB16-1005 includes language that could result in the State Engineer curtailing the use of individual rain barrels if a water right holder can prove that those rain barrels have impacted their ability to receive the water that they are entitled to by virtue of their water right.

## Rain barrel use under SB09-080

Under special circumstances explained in Senate Bill 09-080, rural residents that qualify for “exempt” wells may collect rainwater with a Rooftop Precipitation Collection System Permit from the Colorado Division of Water Resources. Though these collection system permits do not limit the size of the rain barrel, the water must be collected from the roof of the primary residence and the rainwater may only be used for the uses allowed under the resident’s exempt well permit. For example, if the well permit allows for household uses only, then the rainwater could only be applied to non-potable uses in the residence; if the well permit allows for

household uses and outdoor uses including lawn and garden irrigation and/or animal watering, then the rainwater could also be used for those uses.

Colorado residents that qualify for exempt well permits may be able to collect 110 gallons of water under HB16-1005 and collect rainwater for additional uses under SB09-080, so long as they can meet the restrictions described for the two laws.

Rooftop Precipitation Collection System Permit applications can be obtained from the Colorado Division of Water Resources. The application provides notice of intent to collect precipitation and a description of how it will be captured. Instructions on acquiring a rooftop precipitation collection permit can be found at the website for the Colorado Division of Water Resources, under the category “Well Permitting” and sub-category “Rainwater Collection (requiring Exempt Well).” To qualify for a Rooftop Precipitation Collection System Permit, you must satisfy these conditions:

- The property on which you collect the rainwater is residential property.
- You have a permit to use an exempt well, or you are legally entitled to an exempt well for the water supply.
- You collect rainwater only from the rooftop of your domestic residence.
- You use the water only for those uses that are allowed by, and identified on your well permit.

## Rainwater collection under HB09-1129

Another special circumstance outlined in Colorado HB09-1129 allows developers to participate in pilot projects that harvest rainwater and put it to beneficial, though non-essential, use in the subdivision. These projects may only operate according to an engineered plan, submitted to the state engineer for approval and eventually, to the water court. Individual landowners are not eligible for these pilot projects.

## Concerns about Mosquitos

In order to prevent rain barrels from becoming mosquito breeding grounds, it is important to follow several best practices. First, although any container can be used to collect rainwater, House Bill 16-1005 requires the container to be equipped with a sealable lid. Fortunately, many rain barrels that can be purchased online or from a local home supply store

have lids. Second, the rain barrel should be completely emptied every month (or less). If you plan to be away from the home for more than a week, you should disconnect your rain barrel from the downspout.

## Concerns about Water Quality

Rain in urban and industrialized areas may contain various impurities absorbed from the atmosphere, including arsenic and mercury. In Colorado, rain is infrequent, but rainwater quality is generally good. However, the infrequency of rainfall results in accumulation of bird droppings, dust and other impurities on rooftops between rain events. The presence of these impurities in collected rainwater is affected by roofing materials, pitch, and area and may occur in high concentrations when it does rain. Heavy metals such as cadmium, copper, lead, zinc, and chromium have been detected in rainwater collected from rooftops. The phenomenon of acid rain can also cause chemical compounds to be leached from roofing materials.

The best strategy is to filter and screen out contaminants before they enter the storage container. Dirty containers may also become a health hazard or a breeding ground for insects and other pests. Various methods can be used to purify rainwater. First-flush diverters ensure a certain degree of water quality in harvested rainwater. The first several gallons of runoff from a gutter, roof, or other surface are likely to contain various impurities such as bird droppings and dust. A first-flush device prevents this initial flow from draining into the storage tank. Many first-flush devices have a simple design. Such devices include tipping buckets that dump when water reaches a certain level. In addition, there are containers with a ball that floats with the rising water to close off an opening after an inflow of 5 gallons. Water is then diverted to a pipe leading to the storage container. This use of simple technology is an attractive feature of rainwater harvesting. Roof washing is not needed for water used solely for irrigation purposes.

Due to concerns surrounding microbial contamination of harvested rainwater, it is not recommended as a source of drinking water for humans. However, properly designed, constructed, and maintained systems that include disinfection steps have been successfully used for private domestic water supplies.

## Homeowner's Association Rain Barrel Restrictions

A homeowner's association (HOA) cannot ban the use of rain barrels by its members, however it can impose "reasonable" aesthetic requirements about the location and/or appearance of rain barrels. For example, an HOA may require that rain barrels be placed in backyards and/or be a certain color that blends into the outdoor landscape.

## Frequently Asked Questions (FAQs)

**Q. Do I Need a Permit to Use Rain Barrels?**

The passage of HB16-1005 allows the use of two rain barrels without the need for obtaining a special permit, as long as the collected precipitation is used for outdoor purposes, including irrigation of lawns and gardens. However, if you want to use rain barrels as described and allowed by SB09-080, you will need to obtain a rainwater collection permit from the Colorado Division of Water Resources.

**Q. Can I send downspout water onto my garden?**

Yes. This situation is acceptable as long as rainwater is directed from the rooftop to the garden.

**Q. How much irrigation could I expect to accomplish with rain barrels?**

Each time you collect the maximum 110 gallons of water allowed in rain barrels, you can adequately irrigate approximately 180 square feet (a bit smaller than a 15 foot by 15 foot area) of vegetable garden or lawn area with the captured water. This estimate is based on CSU Extension recommendations to water lawns and vegetables gardens with about 1 inch of water during each irrigation cycle. However, a typical rain barrel user can only expect the rain barrels to completely fill about 10-15 times during the growing season, while vegetable gardens and lawns need to be irrigated at least twice as times per year depending on watering practices. Thus, supplemental irrigation will still be necessary to maintain a healthy lawn and vegetable garden.

**Q. Can I use rainwater to water my horse/sheep/chickens?**

HB16-1005 permits rainwater collection specifically for landscape uses only. Therefore, rainwater collected in rain barrels as allowed by HB16-1005 cannot be used for animal watering. However, rainwater collected in rain barrels as allowed by a Rooftop Precipitation Collection System Permit issued under SB09-080 can be used for animal watering, but only if the exempt well permit allows animal watering. Refer to the Rain barrel use under SB09-080 section above for more detail.

**Q. Can I water an attached greenhouse? Can I water houseplants? What's the line between many houseplants and a greenhouse? Is a sunroom with plants legal?**

HB16-1005 permits rainwater collection specifically for outdoor uses. The basic SB09-080 permit stipulating "ordinary household use in one single-family dwelling (no outside use)" would support a reasonable understanding of "ordinary household use in one single-family dwelling (no outside use)" that includes watering of typical household plants in a sunroom or otherwise, especially if the water is taken from indoors. The SB09-080 permit would NOT allow for watering plants in a greenhouse where such a building is specifically dedicated to growing plants. There is no definitional line between "many houseplants" and a greenhouse, unless obviously the greenhouse is an attached room or detached building used specifically dedicated to growing plants.

**Q. Can I wash my car with collected rainwater?**

HB1005 states that captured rainwater must be used on the same property from which the rainwater was captured, for outdoor purposes only. This could include uses such as washing your car on your property. Permits authorized under SB09-080 stipulate "ordinary household use" in one single-family dwelling (no outside use) and would NOT allow for car washing. Such use is limited to drinking and sanitary uses inside the home.

**Q. Can I fill my outdoor hot tub with rainwater?**

No. The permit authorized under SB09-080 stipulating "ordinary household use" would NOT allow the use of captured

An appropriation is made when an individual physically takes water from a stream or well (when legally available) and puts that water to beneficial use. The first person to appropriate water and apply that water to use has the first right to that water within a particular stream system. This person, after receiving a court decree verifying their priority status, then becomes the senior water right holder and that water right must be satisfied before any other water rights are filled. In Colorado, the state engineer and director of the Colorado Division of Water Resources, has the statutory obligation to protect all vested water rights. The process of allocating water to various water users is traditionally referred to as water rights administration, and is the responsibility of the Division of Water Resources.

rainwater to fill an outdoor hot tub. This includes single-family or multiple dwelling unit situations.

**Q. Can I flush my toilet with rainwater?** HB16-1005 permits rainwater collection specifically for nonpotable outdoor uses only. Therefore, rainwater collected in rain barrels as allowed HB16-1005 cannot be used for flushing toilets. However, flushing toilets would be considered "ordinary household use" and rainwater collected in rain barrels as allowed by a Rooftop Precipitation Collection System Permit issued under SB09-080 would be allowed.

**Q. Can I put a dog – water dish outside? Can I wash my windows outside? Can I empty used water outside? Can I water a pot of flowers by my front door?**

There are endless scenarios that are both humorous and pedantic. The basics of rainwater collection in Colorado are that it may be collected and used for lawns, gardens and landscapes. If you have a permit for rainwater collection under SB09-080, you may use the rainwater as a substitute for water that would ordinarily be pumped from your private exempt well and subject to the limitations of your well permit.

## References and additional resources

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