

Nonpotable Water Service

CUSTOMER HANDBOOK



Colorado Springs Utilities

It's how we're all connected

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Introduction

This customer handbook provides information for requesting new or modified nonpotable water service. It also identifies applicable regulations surrounding the use of nonpotable water when the source contains reclaimed water.

Colorado Springs Utilities (Springs Utilities) owns and operates the nonpotable water system for the purpose of irrigation and nonresidential uses. Due to regulatory and system constraints, the nonpotable water system is **not** available for use at single family residences or for fire protection.

Depending on the location within Springs Utilities’ nonpotable water system, the source can be either raw water (untreated surface water and/or groundwater), reclaimed water (treated wastewater), or a blend of raw and reclaimed water. The portion of the system that treats and distributes reclaimed water or a blend of raw and reclaimed water is operated under approval by the Colorado Department of Public Health and Environment (CDPHE). The applicant is expected to comply with all rules and regulations as outlined in this handbook. Water from these sources is not subject to the same degree of treatment as potable water.

All Springs Utilities’ Line Extension and Service Standards applicable to nonpotable water system extensions and service will govern Springs Utilities’ approval of detailed construction design plans. These standards can be found at www.csu.org.

Request for Service

Step 1 - (Preliminary Evaluation)

Existing and new nonpotable commercial water customers should contact Springs Utilities to discuss the feasibility of service given their site-specific requirements and constraints prior to submittal of an *Application for Nonpotable Water Availability* (Step 2). Strategic Account Management may be contacted at:

**Colorado Springs Utilities
Attn: Strategic Account Management
111 S. Cascade, 2nd Floor
MC 1025
Colorado Springs, CO 80903
719-668-3841**

Step 2 - (Nonpotable Water Availability)

Nonpotable water resources are limited and are not available in all of Springs Utilities' service area. Therefore, new nonpotable customers and existing nonpotable customers expanding or modifying existing systems shall complete the *Application for Nonpotable Water Availability* (see Appendix) and submit it and all applicable service information to Water Planning and Design for nonpotable water availability prior to construction plan submittal (Step 3). Water Planning and Design can be contacted at:

**Colorado Springs Utilities
Attn: Water Planning and Design
1521 Hancock Expressway
MC 1821
Colorado Springs, CO 80903
719-668-6538
water_planning@csu.org**

Within 10 working days from receipt of the information, Springs Utilities' review will be completed and a *Notice of Nonpotable Water Availability* (see Appendix) will be provided by Water Planning and Design to the applicant notifying them of either the acceptance or denial of their *Application for Nonpotable Water Availability*. In the case of acceptance, Springs Utilities will notify the applicant of special requirements associated with the design of the new or modified nonpotable water system.

Step 3 – (Engineered Construction Plans)

Upon receipt of the *Notice of Nonpotable Water Availability*, the customer shall submit complete water construction plans to Utilities Development Services (UDS) for review via the website at www.csu.org. Questions regarding the submittal process may be directed to UDS at 719-668-8111.

Step 4 – (Users of Reclaimed Water)

Upon acceptance of a new system whose source of nonpotable water includes reclaimed water as indicated on the *Notice of Nonpotable Water Availability*, the applicant would be subject to CDPHE Regulation No. 84 and shall submit a *User Plan to Comply* (form can be downloaded from <https://www.colorado.gov/cdphe>) with the water construction plans (Step 3). The Environmental Services Department/Regulatory Services Section (EVS/REG) will submit this and other required documentation to the CDPHE on behalf of the reclaimed water user. The CDPHE shall review the *User Plan to Comply* and, upon approval, issue a *Notice of Authorization* (NOA) for the use directly to the reclaimed water user. The water user must provide a copy of the NOA to UDS once received from CDPHE. Additionally, existing reclaimed water system modifications may require similar notification and approval from the CDPHE. CDPHE approvals for new or modified reclaimed water systems may take two to three months.

The applicant should consult with Springs Utilities EVS/REG to complete the *User Plan to Comply*:

**Colorado Springs Utilities
Attn: EVS/REG
121 S Tejon, 4th Floor
Colorado Springs, CO 80903
719-668-4477**

Information regarding current CDPHE reclaimed water regulatory requirements can be found on the CDPHE website at <https://www.colorado.gov/cdphe>

Step 5 – (Approval of Plans)

UDS will notify the customer that the plans have been approved and the project may proceed to construction. The applicant will be advised by UDS of the number of approved plans to submit to Springs Utilities.

For reclaimed water systems, the plans will not be approved by UDS until issuance of the new/modified NOA.

Step 6 – (Payment of Fees)

The applicant should contact Utilities Development Services to pay applicable Development Fees for nonpotable water service. The Utilities Development Services offices are located at:

**Regional Building – 2nd Floor
2880 International Circle
Colorado Springs, CO 80910
719-668-8111**

Upon payment of applicable fees, Utilities Development Services will set up a pending meter set order for nonpotable water service.

Step 7 – (Construction & Inspections)

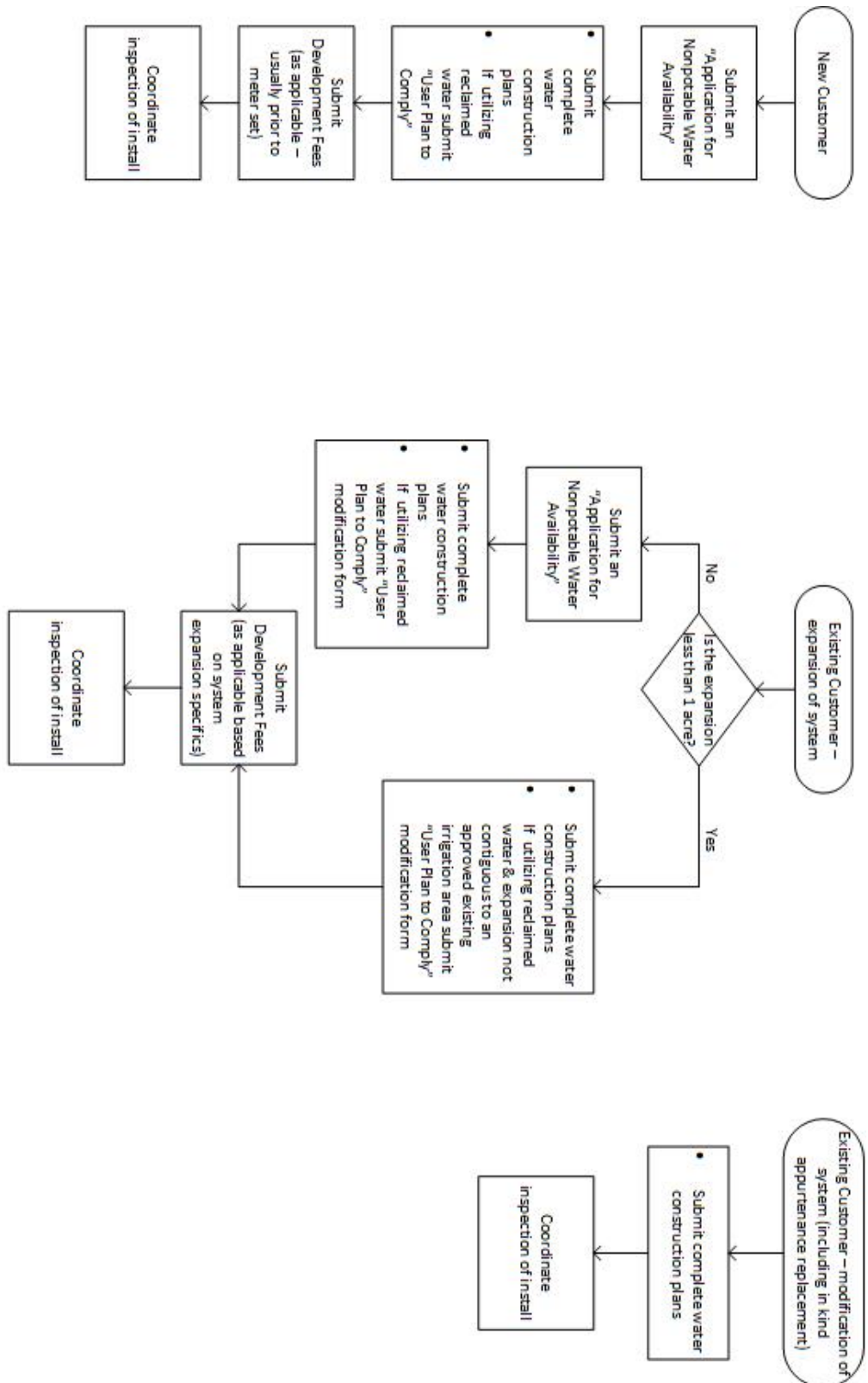
The applicant will coordinate with both the Water Inspection Group and EVS/REG to ensure the installation is built as designed to Springs Utilities Water Line Extension and Service Standards, CDPHE Regulation No. 84 and the NOA, as applicable.

Once final approval is given for the installation, the pending order will be released and a nonpotable meter set will be scheduled.

The contact numbers for coordinating inspections are:

Water Inspection Group ... 719-668-4658
EVS/REG..... 719-668-4477

Appendix



Generalized Flow – Nonpotable Water Approval Process			
To be used in conjunction with: Nonpotable Water Service Customer Handbook			
SIZE	FORMING	DRAWING NO.	REV.
SCALE	NA	SHEET	1
1-29-16		1 OF 1	

Worker Health Information for Nonpotable Water Systems

Potential Health Hazards

Nonpotable water is provided by Colorado Springs Utilities (Springs Utilities) for landscape irrigation of areas such as golf courses, parks, cemeteries, school grounds, and multi-unit housing complexes and for other approved uses. Springs Utilities' nonpotable water system can convey raw water (untreated surface or groundwater), reclaimed water (treated wastewater), or a blend of both sources. Water from these sources is not subject to the same degree of treatment as potable water. Therefore, nonpotable water has the potential to contain pathogenic organisms such as bacteria, viruses, and protozoa. A variety of management practices are used to assure public health protection in nonpotable water use areas and are required through the City of Colorado Springs Code, Springs Utilities' Water Line Extension and Service Standards, and state regulation (when applicable). However, persons working on or operating nonpotable water systems are more likely to contact the water. These workers must be informed of the potential health hazards associated with contact or ingestion of nonpotable water.

The sources of raw water vary depending on the geographic location of the nonpotable water user. However, most of Springs Utilities' customers receive some surface water from Monument Creek. A few customers receive groundwater. Springs Utilities has no direct control of the quality of these raw water sources. Water from these sources receives limited or no treatment prior to entering the nonpotable water system. Currently, there are no regulatory requirements for raw water sources utilized for approved uses.

Reclaimed water is produced at both our Las Vegas Street and J.D. Phillips Water Resource Recovery Facilities. Wastewater is treated through a multi-step process to minimize the number of viable pathogenic organisms and reduce the public health risk of contracting disease. Reclaimed water treatment and quality is subject to regulatory requirements that are imposed by the Colorado Department of Public Health and Environment. Despite the significant level of treatment, reclaimed water is not completely free of pathogens, but free of infective doses of pathogens when only casual contact is made with the water.

The primary route of exposure to nonpotable water-associated pathogens is ingestion, although other routes, such as respiratory (inhalation), cutaneous (through the skin), and ocular (through the eyes), can be involved. These alternate routes, however, are more than likely inconsequential. Nonpotable water pathogens can cause a variety of gastroenteric diseases, most commonly gastroenteritis or "stomach discomfort". Gastroenteritis may cause stomach cramps and/or diarrhea with symptoms lasting approximately 3 to 24 hours. Prolonged skin contact with reclaimed water may cause a topical allergic reaction, such as a rash. Persons working on or operating nonpotable water systems should follow proper hygienic procedures to protect themselves.

Proper Hygienic Procedures

Nonpotable water is not subject to the same level of treatment as potable water, but is subject to levels of treatment designed to protect recreational swimmers in ambient waters. Obviously, your level of exposure will be less than that of a swimmer. Nevertheless, it is important that workers who may be exposed to nonpotable water understand and practice proper hygienic procedures as a routine precaution.

Springs Utilities recommends the following minimum precautionary measures to reduce worker contact with nonpotable water:

- Workers should not be subjected to prolonged reclaimed nonpotable water sprays
- Workers should be provided with protective clothing when there will be more than casual contact with

the nonpotable water

- Wear/use equipment appropriate to tasks being undertaken
- Precautions should be taken to avoid contamination of food taken into nonpotable use areas. Food should not be taken into areas still wet with nonpotable water
- Do not consume food or drink, and do not smoke while working with nonpotable water
- DO NOT DRINK nonpotable water. Safe drinking water should be supplied for workers. Where bottled water is provided, the water should be in contamination-proof containers and protected from nonpotable water sprays and dust.
- Hand washing facilities should be provided for all employees
 - Wash hands well with soap
 - ✓ before eating
 - ✓ before drinking
 - ✓ before smoking, and
 - ✓ at the end of the working day

Application for Nonpotable Water Availability

Submit to:
Colorado Springs Utilities Water Planning and Design
719-668-6538
Water_planning@csu.org

Date: _____

Project: _____
(Subdivision, Address, and Project Title)

Type of Project: ___ New ___ Modified Existing ___ Multi-Phase

Type of Use: _____
Landscape Irrigation () Agricultural Irrigation () Industrial () Other ()

APPLICATION REQUIREMENTS FOR PROJECT REVIEW

- ___ Nonpotable water demand per building (GPM)
- ___ Nonpotable irrigation water demand per site (GPM)
- ___ Preliminary landscape plan include sq ft (irrigation only)
- ___ Internal plumbing plans (industrial use only)
- ___ Nonpotable water system plan
- ___ Nonpotable site irrigation plan

Summary of Project (explain any special conditions & submit site plan) _____

Projected date that site will be ready for nonpotable water service: _____

Applicant agrees to provide Colorado Springs Utilities with a recorded plat or acceptable easements prior to construction. The Applicant agrees to notify Colorado Springs Utilities of any changes following submittal of application that may affect the need for water and wastewater service.

Applicant Name (Please type or print)

Business Name

Address

Telephone Number

Email



Nonpotable Water System

Notice of Nonpotable Water Availability

Applicant: _____

Address: _____

City, State, Zip Code: _____

Phone Number: _____

Project name and location: _____

Has been: Approved Disapproved for nonpotable water service

Potential water sources: Raw Water Only Reclaimed Water Only

Blend of Raw Water and Reclaimed Water

Comments: _____

Applicant notified by: _____

(Name and title)

(Date)

Next Steps:

1. If noted above that the source of nonpotable water will contain reclaimed water, applicant must complete a User Plan to Comply form. If required, this form will be attached to this Notice of Nonpotable Water Availability. Contact EVS/REG for additional information on the User Plan to Comply (719-668-4477).
2. Please submit construction plans and the completed User Plan to Comply form to Colorado Springs Utilities Development Services for review. Construction plans and User Plan to Comply can be submitted online at www.csu.org.

Information regarding design and construction of nonpotable systems can be found in the Water Line Extension and Service Standards at www.csu.org.