

Public Water System Summary

System Name	
PWSID	
Date	

Introduction

Purpose of the Drinking Water System Inventory

The Drinking Water System Summary identifies all contacts, populations, sources, treatment and chemicals, and facilities used to produce finished drinking water.

Submittal to the Department

Colorado Department of Public Health and Environment
Water Quality Control Division/Compliance Assurance Section
4300 Cherry Creek Drive South
Denver, CO 80246-1530
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Revisions

Water systems are required to submit any changes related to the inventory to the Department within thirty (30) calendar days following the effective date of the change. Each part may be submitted separately, if only one part is affected by the change.

General Definitions

Public Water System Identification Number (PWSID) – The identification number assigned to a water system by the Colorado Department of Public Health and Environment.

Colorado Department of Public Health and Environment (the Department) – The agency that oversees and enforces the *Colorado Primary Drinking Water Regulations* according to a primacy agreement with the US Environmental Protection Agency (EPA).

Contact Information

Contact information completed by _____

Signature _____ Date _____

Revision? Actual date of changes described in this revision _____

System Mailing Address: _____

City: _____ County: _____ State: _____ Zip: _____

System Physical Address: _____

City: _____ County: _____ State: _____ Zip: _____

System Phone: _____ Ext: _____ Fax: _____

E-mail: _____

Administrative Contact Name: _____

(The administrative contact is the primary contact person for all Department mail or other communications regarding drinking water compliance.)

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Ext: _____ Fax: _____

E-mail: _____

Owner/Legal Entity Contact Name: _____

(The legal owner is an individual, corporation, partnership, association, state or political subdivision thereof, municipality, or other legal entity.)

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Ext: _____ Fax: _____

E-mail: _____

Emergency Contact Name: _____

(The emergency contact should be someone that the Department can contact in an emergency if the administrative contact is unavailable.)

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Ext: _____ Fax: _____

E-mail: _____

Operator in Responsible Charge Name: _____

Certification Type: _____ Certification Level: _____ Expiration Date: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Ext: _____ Fax: _____

E-mail: _____

Population Types and Seasons

System Population Certification

Revision? Actual date of changes described in this revision _____

Resident Population means the average number of people whose primary residence is served by the system. The individual need not live at the residence for 365 days per year for it to be considered his/her primary residence.

_____ *Number of year-round residents served by system*
_____ *Number of taps (buildings/houses) serving year-round residents*

Non-Transient Population means the average number of individuals served per day, during the year or normal operating period(s), who do not reside at the place served by the water system but have a regular opportunity to consume water produced by the system. Regular opportunity is defined as four or more hours per day, for four or more days per week, for six months or more per year.

_____ *Number of non-transients served by system*
_____ *Months in operation (example: May – September)*

Transient Population means the average number of individuals served per day during the year or annual operating period(s), who have an opportunity to consume water from the system but who do not meet the definition of either residents or non-transient customers. (Restaurant patrons are an example of transient consumers.)

_____ *Number of transients served by system*
_____ *Months in operation (example: May – September)*

Certification of Accuracy

“By signing this document, I hereby certify that the information above is true, accurate, and complete to the best of my knowledge and belief.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.”

Signature _____ Date _____

Department Use:
Classification

Water Sources Definitions

Water Types

Groundwater (GW) – Any water under the surface of the ground being neither “surface water” nor “groundwater under the direct influence of surface water.”

Surface water (SW) – Any water source that is open to the atmosphere and subject to surface runoff.

Groundwater under the direct influence of surface water (GWUDI or GU) – Any water beneath the surface of the ground with significant occurrence of insects or other macro-organisms, algae or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*; or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity or pH that closely correlate to climatological or surface water conditions.

Purchased water (GWP, SWP or GUP) – Water that you receive (whether or not you purchase it) from another water system or water hauler.

Integration agreement – An agreement between two or more public water systems, one of which is a wholesale/supply system, whose distribution systems are physically connected. The systems agree to operate using a common set of standards that the wholesale system establishes for the purpose of maintaining and protecting drinking water quality. Integrated systems must submit their agreement to the Department for approval.

Availability

Permanent (P) – A primary water facility

Emergency (E) – A water facility that is used only as the result of extreme circumstances, and is otherwise kept offline. These facilities may be either connected or disconnected from a treatment plant/distribution system. This type of facility is most likely never used. Nitrate and total coliform samples would need to be obtained within 2 days after start-up. The division would need to be notified of start-up within 24-hours.

Interim (I) – A water facility that is either used as a result of high water demand or out of necessity to maintain water rights. The facility may be used once every few weeks or months or once every few years. These facilities may be either connected or disconnected from a treatment plant/distribution system. Routine Sampling will be required at the Entry Point to the Distribution System.

Seasonal (S) – A water facility that is typically used every year to aid a system in meeting high water demands. While a water system may not know when it will need a seasonal source, it is most often used every year. These also may be referred to as peaking facilities. Routine sampling will be required at the Entry Point to the Distribution System.

Other (O) – A facility that is no longer used for drinking water.

Water Source Details

Inventory of water sources completed by _____

Signature _____ Date _____

Revision? Actual date of changes described in this revision _____

Groundwater Sources

ID (assigned by Department)	Source Name	Aquifer Name	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in operation	Well Depth	First Draw	Latitude*	Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Surface Water Sources

ID (assigned by Department)	Source Name	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in operation	Intake Latitude*	Intake Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Expand tables or add pages as needed for additional sources

Groundwater Under the Direct Influence of Surface Water Sources

ID (assigned by Department)	Source Name	Aquifer Name	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in operation	Well Depth	First Draw	Latitude*	Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Purchased Water Sources

Name of Supplying Water System	Connection Location (cross-streets and/or latitude/longitude*)	Type (GW, SW or GU)	Do you receive treated or raw water?	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in use	Approved Integration Agreement? Yes / No

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Expand tables or add pages as needed for additional sources

Water Treatment Codes and Objectives

Treatment Codes –

The codes below are generated by the USEPA for the purpose of standardizing the treatment processes as they are cataloged and tracked within the federal and state database programs. Water systems should have individual process flow diagrams for treatment; from these diagrams, each process should have an associated code. If you struggle to understand the different treatment codes below, please contact the Division's Engineering Section for assistance.

DISINFECTION

401	Gaseous Chlorination (Primary or Post filtration)
403	Gaseous Chlorination, Pre filtration
421	Hypochlorination, Bleach, (Primary or Post filtration)
423	Hypochlorination, Bleach, Pre filtration
200	Ammonia (Chloramines)
220	Chlorine Dioxide
885	Chlorination – Calcium Hypochlorite (HTH)
887	Chlorination – Manual/Hand
825	Contact Time
541	Ozonation, Post filtration
543	Ozonation, Pre filtration
720	Ultraviolet Radiation

PRETREATMENT, COAGULATION AND SEDIMENTATION

520	Microscreening
840	Presedimentation
820	Aeration
240	Coagulation
600	Rapid Mix – mechanical mixing
830	In line static mixing
831	Hydraulic jet mixing
125	Activated Carbon, Powdered
560	Permanganate, Potassium or Sodium
360	Flocculation
880	Dissolved Air Flotation (DAF)
845	Upflow Clarifier
660	Sedimentation

FILTRATION

345	Filtration, Granular Media
344	Filtration, Pressure Sand
343	Filtration, Greensand
801	Filtration, Bag
810	Filtration, Bag - Roughing
341	Filtration, Cartridge
865	Filtration, Cartridge - Roughing
895	Filtration, Microfiltration (MF)
347	Filtration, Ultrafiltration
890	Filtration, Nanofiltration
640	Filtration, Reverse Osmosis
121	Filtration, Granular Activated Carbon
826	Natural or Riverbank Filtration (GWUDI)
835	Cation Exchange
836	Anion Exchange

OTHER FORMS OF TREATMENT

100	Activated Alumina
160	Algae Control
380	Fluoridation
815	Inhibitor/Sequestering Agent, Phosphate based
449	Inhibitor, Silicate based
847	pH Adjustment - suppression
848	pH Adjustment - elevation
580	Peroxide
620	Reducing Agent
700	Sludge Treatment

Treatment Objective Codes

D	Disinfection
P	Particulate Removal
F	Iron Removal
M	Manganese Removal
I	Inorganic Chemicals Removal
O	Organic Chemicals Removal
R	Radionuclide Removal
T	Taste / Odor Control
S	Softening (Hardness Removal)
C	Corrosion Control
B	Disinfection Byproduct Control
E	Dechlorination
A	pH Adjustment

Water Treatment Details

Inventory of treatment plants completed by _____

Signature _____ Date _____

Revision? Actual date of changes described in this revision _____

Treatment Plant Name and ID <small>(ID assigned by Department)</small>	
Contributing Sources	

Rated Capacity <small>Million Gallons per Day (MGD)</small>	Availability (P, E, I, S or O) <small>If seasonal, include months anticipated to be in operation</small>	Latitude*	Longitude*

Treatment Codes (from previous page) List in Order of Flow <small>(including descriptions of tanks used for disinfection contact time)</small>	Treatment Objective and Objective Codes (from previous page)
<i>Example: 421 Hypochlorination, Bleach, (Primary)</i>	<i>D - Disinfection</i>
<i>Example: 347 Filtration, Ultrafiltration</i>	<i>P - Particulate Removal</i>

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Treatment Plant Name and ID (ID assigned by Department)			
Contributing Sources			
Rated Capacity Million Gallons per Day (MGD)	Availability (P, E, I, S or O) If seasonal, include months anticipated to be in operation	Latitude*	Longitude*
Treatment Codes (from previous page) List in Order of Flow (including descriptions of tanks used for disinfection contact time)		Treatment Objective and Objective Codes (from previous page)	
<i>Example: 421 Hypochlorination, Bleach, (Primary)</i>		<i>D - Disinfection</i>	
<i>Example: 347 Filtration, Ultrafiltration</i>		<i>P - Particulate Removal</i>	
<p>*Latitude and longitude data collection method <input type="checkbox"/> GPS <input type="checkbox"/> Map <input type="checkbox"/> Google Earth <input type="checkbox"/> Other Date _____</p>			

Distribution System Definitions

Entry point – A sampling point after complete water treatment (after disinfection contact time) but before the first consumption tap. A water system may have multiple entry points, especially if it has multiple treatment plants. A water system may have multiple treatment plants but only one entry point if, for example, those treatment plants blend in a storage tank for disinfection contact time before distribution (in this example, a sampling point at the storage tank is the entry point).

Distribution system storage facility – Any finished water storage tank at the treatment plant or in the distribution system that is not considered part of disinfection contact time.

Booster treatment facilities – Any chemical booster stations after the treatment plant (such as disinfection or corrosion control chemical booster stations in the distribution system).

Consecutive connection – A master meter connection from your water system to another water system for purposes of supplying drinking water to the other system.

Integration agreement - An agreement between two or more public water systems, one of which is a wholesale/supply system, whose distribution systems are physically connected. The systems agree to operate using a common set of standards that the wholesale system establishes for the purpose of maintaining and protecting drinking water quality. Integrated systems must submit their agreement to the Department for approval.

Pump station – A facility used to pump water or increase water pressure. Pump stations are not used for chemical additions or other treatment and do not need to be reported on this form.

Distribution System Details

Inventory of distribution system completed by _____

Signature _____ Date _____

Revision? Actual date of changes described in this revision _____

Number of Distribution Systems

Does the water system have multiple distribution systems? No Yes; How many? _____

If yes, how are the distribution systems operated? (i.e. are they completely independent of each other or does water flow from one to another through operator-controlled valves, etc.) _____

Entry Points

ID (assigned by Department)	Location Description and Contributing Treatment Plants (or Sources)	Latitude*	Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Storage Facilities & Other Finished Water Reservoirs

ID (assigned by Department)	Storage Facility Name	Contributing Treatment Plants (or Sources)	Volume (gallons)	Latitude*	Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Booster Treatment Facilities (Post Entry-Point Treatment)

ID (assigned by Department)	Facility Name	Treatment Codes (Refer to water treatment definitions)	Latitude*	Longitude*

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Consecutive Connections Serving Another Water System

Receiving PWSID	Receiving System Name	Do you supply treated or raw water?	Connection Latitude*	Connection Longitude*	Integrated Agreement? Yes / No

*Latitude and longitude data collection method GPS Map Google Earth Other Date _____

Expand tables or add pages as needed for additional facilities and connections

Additional Information

Include any additional information that would be helpful to understand

- the water source(s) and how the sources are operated within your overall production scheme;
- the treatment plants or processes; or
- the distribution system.