

Small Community Water System SYSTEM WATER PLAN UPDATE FORM

CEDAR GROVE WATER CO.

Community Water System Name

91-000018.0000

91- Community Water System Number

(A.R.S. § 45-342) *Community Water System Planning and Reporting Requirements***Definitions:**

"Community water system" means a public water system that serves at least fifteen service connections used by year-round residents of the area served by the system or that regularly serves at least twenty-five year-round residents of the area served by the system. A person is a year-round resident of the area served by a system if the person's primary residence is served water by that system.

"Large community water system" means a community water system that serves water to more than one thousand eight hundred fifty persons.

"Public water system" means an entity that distributes or sells water and that qualifies as a public water system under section 49-352, subsection B.

"Small community water system" means a community water system that does not qualify as a large community water system.

The System Water Plan has three components:

- ◆ Water Supply Plan
- ◆ Drought Preparedness Plan
- ◆ Water Conservation Plan

Instructions are listed under each section of this form.

RECEIVED**MAY 31 2019****ARIZONA DEPARTMENT
OF WATER RESOURCES****Exemptions:**

- Systems with a Designation of Assured Water Supply may skip Part 1: Water Plan. If you have applied for and ADWR has issued a Designation of Assured or Adequate Water Supply for your entire service area, you'll be listed here: https://new.azwater.gov/sites/default/files/media/List_of_Designated_Providers_1-4-2018_2.pdf
If you're not listed as a Designated Provider, you must complete Part 1.
(Note: A Certification of Adequate Water Supply or a Water Adequacy Report for a specific subdivision is not a Designation. For questions regarding DAAWS contact the DAAWS Office at 602-771-8599.)
- Systems that are located in Active Management Areas (AMAs) and that are regulated under one of the programs for large municipal water providers (serve more than 250 acre-feet water per year) may skip Part 3: Conservation Plan.
- A system located in an AMA and regulated as a small provider may skip the Conservation Plan if it can demonstrate that it will be regulated as a large provider within the next five years. For instructions, see A.R.S. § 45-342 F

Mail or email your system water plan to the following address:

Arizona Department of Water Resources
Community Water Systems
P.O. Box 36020
Phoenix, AZ 85067-6020
ecws@azwater.gov



For assistance, please contact us at:
Phone: (602) 771-8585
Email: ecws@azwater.gov



Receipt No.

15100

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PART 1: WATER SUPPLY PLAN

Cedar Grove Water Co.

Community Water System

Does your system have a Designation of Assured Water Supply? Yes No

If yes, you may skip this section (A.R.S. § 45-342) and continue with Part 2 – Drought Preparedness Plan. If you're unsure, check [this list](#) of water providers with a Designation of Assured or Adequate Water Supply or visit the ADWR website to view list.

Please select how you will report water measurements in this form. Use either gallons or acre-feet, but not both. Gallons Acre-feet
(Note: To convert acre-feet to gallons, multiply by 325,851. To convert gallons to acre-feet, divide by 325,851.)

A. Service Area Lands

- 1. City/town where system is located: SHOWLOW

- 2. County where system is located: APACHE

- 3. Township/range/section where your system is located (if known):

- 4. Approximate square miles of service area:

- 5. Average residential lot size:
 - Less than 10,000 sq ft
 - 10,000 sq ft – 1 acre (43,560 sq ft)
 - 1 – 5 acres
 - 5.1 – 10 acres
 - More than 10 acres

- 6. Describe the area you serve. The map or description must describe or show the **boundaries of your service area, transmission and distribution lines. If you are a large system (serve more than 1,850 people), you must submit a service area map** unless you have already submitted map pursuant to A.R.S. § 45-498. (The map may also show streets, town limits, landmarks, etc.)

ADWR Well Registration Number (55 - _____)	Depth - to - Water	Date Measured
55-550075 55-504679	440 400	1985 1983
55-087623 55-566375	880 544	1981 1998
55-808434	UNKNOWN	UNKNOWN

(If more space is needed, please attach additional sheets.)

D. Water Sold and Purchased

- Did you sell water to another water system during the past five years? Yes No
If yes, list quantities and systems. Please use the same units (gallons or acre-feet) that you selected previously.
- Did you purchase water from another water system during the past five years? Yes No
If yes, list systems and quantities:

E. System Production/Demand

- How much water did you use from the sources below? If your system is not metered, please estimate. Please use the same units (gallons or acre-feet) that you selected previously.

Will the quantities entered below be mostly metered or mostly estimated?

Mostly metered Mostly estimated

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	TOTAL
2012	Jan	999,000						
	Feb	1,259,000						
	Mar	845,000						
	Apr	1,035,000						
	May	1,491,000						
	Jun	2,258,000						
	Jul	1,970,000						
	Aug	1,437,000						
	Sep	1,017,000						
	Oct	1,073,000						
	Nov	1,125,000						
	Dec	902,000						
								Total 15,411,000
2012 average daily demand (divide total volume by 365 days) =								42,222

7. Type of area served (consider majority of area served). Please check all that apply:
- Residential single family
 - Mixed uses (residential and non-residential)
 - Commercial
 - Mobile home park
 - Institutional (military base, school, or correctional facility)
 - Homeowner's Association or Cooperative
 - Other (please describe):
8. Typical or predominant landscaping type in residential areas: Please check only one type.
- Low water- use landscaping
 - Turf
 - Not landscaped/not irrigated (dirt or natural desert)
 - No outdoor water use (e.g. mobile homes with no yards)
 - Other (please describe):

B. Interconnections

(Note: If you are located within an Active Management Area (AMA), interconnect agreements may be reviewed by the director of ADWR pursuant to substantive policy statement GW37 as authorized by A.R.S. §45-492(C).)

1. Do you have an interconnection with another water system? Yes No
2. If yes, list name of other system(s):
3. Describe the interconnections, including conditions under which water transfer can take place. **If you are a large system provide a map of the interconnections** unless previously provided pursuant to section A.R.S 45-498

C. Sources of Supply

1. Please check all sources of water supply used to meet demand in your system:
 - Groundwater
 - Non-CAP Colorado River water
 - CAP
 - CAP (Stored)
 - Reclaimed water
 - Other (please describe):
2. If you checked groundwater above, do you measure water levels in your wells? Yes No
3. For each well, provide the well registration number and the most recent water level measurement and date measured (if available). **(Note: Do not include water levels at well sites that are sources of supply for hard rock mining or metallurgical processing.)**

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	TOTAL
2013	Jan	999,000						
	Feb	1,259,000						
	Mar	845,000						
	Apr	1,035,000						
	May	1,491,000						
	Jun	2,258,000						
	Jul	1,970,000						
	Aug	1,437,000						
	Sep	1,017,000						
	Oct	1,073,000						
	Nov	1,125,000						
	Dec	902,000						
								Total
								15,411,000
2013 average daily demand (divide total volume by 365 days) =								42,222

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	TOTAL
2014	Jan	963,000						
	Feb	1,056,000						
	Mar	843,000						
	Apr	1,374,000						
	May	1,528,000						
	Jun	2,032,000						
	Jul	1,790,000						
	Aug	2,115,000						
	Sep	1,323,000						
	Oct	1,361,000						
	Nov	965,000						
	Dec	869,000						
								Total
								16,219,000
2014 average daily demand (divide total volume by 365 days) =								44,436

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	TOTAL
2015	Jan	1,050,000						
	Feb	985,000						
	Mar	830,000						
	Apr	1,082,000						
	May	1,312,000						
	Jun	1,610,000						
	Jul	1,531,000						
	Aug	1,678,000						
	Sep	1,675,000						
	Oct	1,414,000						
	Nov	920,000						
	Dec	920,000						
								Total 15,007,000
2015 average daily demand (divide total volume by 365 days) =								41,115

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	TOTAL
2016	Jan	886,000						
	Feb	907,000						
	Mar	905,000						
	Apr	1,356,000						
	May	1,233,000						
	Jun	1,876,000						
	Jul	2,100,000						
	Aug	1,272,000						
	Sep	1,569,000						
	Oct	1,319,000						
	Nov	1,047,000						
	Dec	1,156,000						
								Total 15,626,000
2016 average daily demand (divide total volume by 365 days) =								42,811

2. For systems that use meters to measure groundwater withdrawal and diversions, provide data for the average daily demand, peak day demand, and maximum monthly demand for the past five years.

(Note: Please use the same units (gallons or acre-feet) that you selected previously)

Year	Peak Day Demand		Year	Average Daily Demand	Maximum Monthly Demand
2012	Date:	JUNE 16	2012	42,222	2,258,000
	Quantity:	75,267			
2013	Date:	JUNE 8	2013	42,222	2,258,000
	Quantity:	75,326			
2014	Date:	AUG 17	2014	44,436	2,115,000
	Quantity:	68,226			
2015	Date:	AUG 9	2015	41,115	1,678,000
	Quantity:	54,129			
2016	Date:	JUL 4	2016	42,811	2,100,000
	Quantity:	67,742			

3. In the past five years, were there any instances where you were not able to meet peak demand? Check either the first choice or any of the remaining choices that apply.

- Peak demand was always met
- Well pump failed
- Well casing collapsed
- Well went dry
- Storage tank failed
- Surface water shortage
- Distribution line break/failure
- Interconnect down
- Treatment facility problem/failure
- Other (please describe):

4. Do you have storage facilities?

Yes No

If yes, what is your total storage capacity? 77,500

5. Do you treat your potable water?

Yes No

If yes, describe treatment facilities/methods:

F. Analysis of Projected Water Demand

1. ADWR for assistance with projecting population and demand.

(Note: Please use the same units (gallons or acre-feet) that you selected previously)

Year	Projected Population	Projected average daily demand on system
2022	500	58,000
2027	600	69,600
2037	700	81,200

- 2. Do you anticipate problems meeting these future demands? Yes No

- 3. Do you expect any type of change in your area that could increase the demand on your water supply? Check either the first choice or any of the remaining choices that apply.
 - No change expected
 - Development
 - Population increases
 - Industry
 - Agriculture
 - Other (please describe):

- 4. Do you need assistance with water resource planning? Check either the first choice or any of the remaining choices that apply.
 - No assistance required at this time
 - Conservation resources
 - Projecting future demand
 - Drought planning
 - Well/aquifer information
 - Other (please describe):

- 5. Are you planning to make any changes to help you meet demand over the next 20 years? Check either the first choice or any of the remaining choices that apply.
 - No changes planned
 - Additional and/or improved conservation program
 - Increased storage
 - Additional well(s)
 - Deepen well(s)
 - Other (please describe):



PART 2: DROUGHT PREPAREDNESS PLAN

Cedar Grove Water Co.

Community Water System Name/Number

Instructions

Before beginning your drought plan, please note there are resources available for assistance on ADWR's Community Water System web page: <https://new.azwater.gov/cws/system-water-plan>

Drought Stage Planning for Small Community Water Systems

- Provides examples of drought stages and management measures for smaller water providers.

Conservation and Drought Planning for Community Water Systems: How do they work together?

- Includes tips on drought and conservation planning, as well as example drought stages and management measures for large and small systems.

A. Contact Information

1. FACILITY NAME: CEDAR GROVE WATER CO.

ADDRESS: PO BOX

PHONE NUMBER: 928-242-9725

2. List the persons responsible for directing operations during a water shortage emergency:

NAME: MARK GRAPP

POSITION: GENERAL MANAGER

PHONE NUMBER: 928-242-9725

B. Drought Plan of Action

1. Drought Stages:

Decide how many drought stages you will have for your water system. *ADWR suggests three or four stages, beginning with "no drought – normal conditions".*

Decide what management measures will be appropriate for your system for each drought stage. Fill in the measures you have chosen for each drought stage in the **Management Measures** column of the table. *You may choose measures from the help sheets, choose your own measures, or a combination of the two.*

Drought Stage Name or Number	Management measures (consider measures for the system and for the customers)
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<p>0 (normal conditions)</p>	<p>Meter water use at the source and all connections Ensure meters are working properly Implement leak detection and repair programs Control evaporation from storage tanks Eliminate illegal connections Encourage low water use landscaping Develop water rate structures that encourage efficient water use (higher rates for higher use) Develop arrangements for alternative/back-up water supplies should they become necessary</p>
<p>1 (moderate drought)</p>	<p>Increase system-wide leak detection efforts and expedite repairs Monitor water levels of wells more frequently Communicate drought conditions to customers (include in water bills, post in public places) Establish times and days for outdoor watering (for example, two times per week, between 8 p.m. and 8 a.m.) Encourage use of commercial car washing facilities instead of washing at home Include water-saving tips in water bills Advise customers to check homes for leaks and repair immediately Request that customers reduce water usage by 10% Continue actions from previous stage</p>
<p>2 (severe drought)</p>	<p>Communicate drought conditions to customers (include in water bills, post in public places) Confirm arrangements for emergency supplies should they become necessary Restrict water use during peak demand hours Restrict non-essential outdoor water use, such as pool filling, car washing Request that customers reduce water use by 15% (more than in Stage 1) Continue actions from previous stage</p>

6. Based on your current description of drought stages, what is the highest / worst stage you have declared in the past five years? Please check only one answer.

- Zero Stage
- First Stage
- Second Stage
- Third Stage
- Fourth Stage

7. Based on your current description of drought stages, what stage of drought are you currently implementing? Please check only one answer.

- Zero Stage
- First Stage
- Second Stage
- Third Stage
- Fourth Stage

8. At which stage, if any, do your drought management measures begin to be mandatory? Please check only one answer.

- No measures are ever mandatory
- Zero Stage
- First Stage
- Second Stage
- Third Stage
- Fourth Stage

C. Implementation of Drought Stages

1. Do you utilize any of the following indicators to help you determine when to initiate a drought stage for your system? Please check all that apply.

	Yes	No	Would like to receive
Precipitation and weather forecasts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regional drought conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Range and forage conditions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please describe):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Who has the authority to initiate and/or change a drought stage for your system? **MARK GRAPP
GENERAL MANAGER**

3. If you chose to make any of your management measures mandatory for your customers, how will you enforce them? METER MEASUREMENTS

D. Communication with Customers

1. Do you utilize any of the following for educating your customers about drought conditions and the need for water conservation? Check all that apply.

	<i>Already implementing</i>	<i>Plan to implement</i>
Information with water bill	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Free publications	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Media (radio, TV)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Website	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Speakers bureau presentations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Workshops	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (please describe):		

2. How will customers be notified of a drought stage declaration and implementation of associated management measures? (**Note:** different stages of drought may need different notification methods. If the system has reached the point of a water shortage, rapid notification will be necessary.) Check all that apply.

Deliver notice door to door	<input type="checkbox"/>
Mail notice to service address	<input checked="" type="checkbox"/>
Post signs at well sites	<input type="checkbox"/>
Post signs at entrances to major subdivisions	<input type="checkbox"/>
Other (please describe):	

E. Development of Emergency Supplies

1. How will you get water to your customers in an emergency water shortage situation? (**Note:** It is the community water system's responsibility to have an emergency source of water and an emergency plan in place. Please attach any documentation that will further describe your plan of action.)

Check either the first choice or any of the remaining choices that apply.

- We do not have a backup supply
- Utilize interconnection, list provider: _____
- Haul water, from: OTHER LOCAL WATER SUPPLIERS
- Use backup well
- Provide bottled water
- Drill new well
- Other (please describe):

2. Should alternative/backup water supplies become necessary, do you have arrangements in place to obtain them?

Yes No

3. Have you had to use any of the following methods to augment your supply in the last five years? Check either the first choice or any of the remaining choice that apply.
- No augmentation needed
 - Utilize interconnection, list provider: _____
 - Haul water
 - Use backup well
 - Provide bottled water
 - Drill new well
 - Other (please describe):



PART 3 WATER CONSERVATION PLAN

Community Water System Name/Number _____

Is your system located in an Active Management Area (AMA) and regulated under one of the programs for large municipal water providers? Yes No

If yes, you may skip this section and continue with Part 4 – Certify and Submit.

Below are examples of water conservation measures or best management practices (BMPs) that can reduce water use, improve water efficiency, and enhance drought preparedness. Please check all that apply.

CONSERVATION MEASURES (BEST MANAGEMENT PRACTICES)	Already implementing = <input checked="" type="checkbox"/>	Will implement in next 5 years = <input checked="" type="checkbox"/>
1. General Measures		
Wells are metered	✓	
Service connections are metered	✓	
Water rate structures encourage efficient water use. (e.g. higher rates for higher use)	✓	
Reclaimed water used for landscape watering.	NA	
2. Measures to Limit Lost and Unaccounted for Water		
Leak detection and repair	✓	
Meter testing, repair and replacement	✓	
Storage tank evaporation controls	✓	
Infrastructure and/or storage facility improvements	✓	
Elimination of illegal connections	✓	
Other (Describe)		
3. Measures to Raise Public Awareness		
Free conservation handouts or materials for customers		
Conservation tips with water bills or on website		✓
Request that customers reduce water use by a %		
Participation in special events and/or community programs		✓
Other (Describe)		
4. Measures to Assist Customers or Provide Outreach		
Residential audit program		
Advice on how to check home for leaks and make repairs	✓	
Residential interior retrofit program		
Non-residential interior retrofit program		
Non-residential water budgeting program		
Residential or non-residential low water-use landscape information and/or consultations		✓
High water-use notification	✓	
High water inquiry resolution	✓	
Water waste investigations and assistance		✓
Other (Describe)		
5. Measures to Educate and/or Train Customers		

Adult education and/or training workshops and classes		✓
Youth education program		
Speakers bureau		✓
Xeriscape demonstration garden		
Other (Describe)		
6. Incentives for Efficient Water Use or Conservation		
Residential toilet rebate or incentive for efficient toilets		
Residential toilet replacement		
Rebates or incentives for other efficient fixtures or appliances		
Rebates or incentives for turf conversion or xeriscape installation		
Rebates or incentives for gray water or rainwater fixtures		
Non-residential rebates, incentives, loans, etc.		
Other (Describe)		
7. Measures to Restrict Water use (Conditions of Service or Ordinance)		
Prohibiting water waste or tampering		
Limiting turf or water intensive landscapes in new residences or developments		
Requiring low water-use landscapes		
Designating landscape watering days or times		
Prohibiting high water use activities (such as landscape watering) during peak demand hours		
Requiring water-conserving fixtures or appliances that are more efficient than specified in current state codes		
Requiring hot water recirculation devices		
Requiring retrofits on resale		
Requiring on-site rainwater harvesting		
Requiring gray water plumbing		
Requiring car wash recycling		
Requiring a water use plan for new large commercial or industrial customers		
Other (Describe)		
8. Innovation or Research Programs		
Evaluating a new technology or program		
Implementing a new technology or program		
Researching a new technology or program		
Other (Describe)		



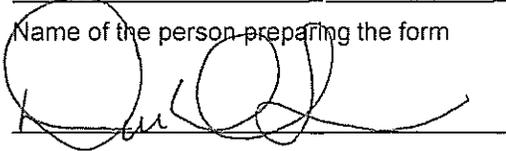
PART 4: CERTIFY AND SUBMIT

Community Water System Name/Number

I HEREBY CERTIFY that the above statements are true to the best of my knowledge and belief.

DUSTIN W DESPAIN

Name of the person preparing the form



Signature of person preparing the form

5/31/2019

Date Submitted

(520) 265 5350

Telephone

ACCOUNTANT

Title

dwdm@despainaccounting.com

Email

Please return form by email, fax or mail to:

Arizona Department of Water Resources
Community Water Systems
P.O. Box 36020
Phoenix, AZ 85067-6020

FAX: 602-771- 8689

EMAIL: ecws@azwater.gov

THANK YOU!

