

**Arizona Department of Water Resources
Large Community Water System
System Water Plan
(2016-2020) Due January 1, 2022**

Community Water System Name

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.

Please refer to the updated [System Water Plan Guidance](#) document accessed on the Community Water System website.

The System Water Plan has three components:

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

Exemptions:

- Systems with a Designation of Assured Water Supply (DAAWS) may skip Part 1: Water Plan. If you have applied for and ADWR has issued a Designation of Assured Water Supply for your entire service area, you'll be listed here [List of Designated Providers](#) .

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(E).

If you are filing a paper copy rather than using the online tool, 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) 771-8610

Email: ecws@azwater.gov

Receipt No.

For official use only

Part 1: Water Supply Plan

Community Water System

See pages 7-10 in the [System Water Plan Guidance](#) document for assistance.

The **Water Supply Plan** must evaluate the water supply needs in the service area and propose a strategy to meet identified needs. Therefore, the **Water Supply Plan** will provide a good foundation for developing the **Drought Preparedness Plan** (Part 2) and the **Water Conservation Plan** (Part 3).

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 the [List of Designated Providers](#) of water providers with a Designation of Assured or Adequate Water Supply or visit the ADWR website at <https://azwater.gov/aaws> to view the current 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:
2. County where system is located:
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.)

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

If yes, list name of other system(s):

2. 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.)

ADWR Well Registration Number (55 - _____)	Depth - to - Water	Date Measured

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

D. Water Sold and Purchased

1. 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.

2. 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

1. 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.
2. 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
2016	Jan							
	Feb							
	Mar							
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
							Total	
2016 average daily demand (divide total volume by 365 days) =								

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	Total
2017	Jan							
	Feb							
	Mar							
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
								Total
2017 average daily demand (divide total volume by 365 days) =								

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	Total
2018	Jan							
	Feb							
	Mar							
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
								Total
2018 average daily demand (divide total volume by 365 days) =								

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	Total
2019	Jan							
	Feb							
	Mar							
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
								Total
2019 average daily demand (divide total volume by 365 days) =								

Year	Month	Groundwater	Colorado River (Non-CAP)	CAP	CAP (Recovered)	Other Surface Water	Reclaimed Water	Total
2020	Jan							
	Feb							
	Mar							
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
								Total
2020 average daily demand (divide total volume by 365 days) =								

3. Determine the past five years of seasonal peak/maximum demand in order to calculate future projection demands in Section F below.
 - 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. If you do not meter, estimate the peak, daily average and maximum monthly demands.

Table 2 (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
2016	Date:		2016		
	Quantity:				
2017	Date:		2017		
	Quantity:				
2018	Date:		2018		
	Quantity:				
2019	Date:		2019		
	Quantity:				
2020	Date:		2020		
	Quantity:				

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?

5. Do you treat your potable water?

☐ Yes ☐ No

If yes, describe treatment facilities/methods:

F. Analysis of Projected Water Demand

Current Population served

Table 3 (Note: Please use the same units (gallons or acre-feet) that you selected previously)

Year	Projected Population *	Projected average daily demand on system **
2026		
2031		
2041		

For assistance with projecting population refer to the population projection tool provided in the “resources” section of the Community Water System website at <https://azwater.gov/cws/cws-resources>. Refer to past use as determined in Table 2

1. Do you anticipate problems meeting these future demands? ☐ Yes ☐ No
2. 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): _____

3. Many resources for water planning are available on the ADWR website with links provided below. If you feel you need further assistance with water planning check any of the areas below

- ☐ No assistance required at this time
- ☐ [Conservation resources](#)
- ☐ [Drought planning](#)
- ☐ [Well information](#)
- ☐ [Groundwater models and aquifer information](#)
- ☐ Other (please describe):

4. 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

Community Water System Name/Number

The purpose of the **Drought Preparedness Plan** is to prevent shortage emergencies during drought conditions by evaluating water demand reductions that can be implemented in response to specific levels of drought impacting the water system.

ADWR encourages water systems to share ideas and information; however, each Plan **should be specific** to the water supplies, water demand and infrastructure of each individual system.

Instructions

Before beginning your drought plan, it is highly recommended to refer to the resources provided on the [Community Water System's webpage](#) to better understand the effective use of "indicators", "triggers" and "management responses" in order to develop a realistic and enforceable drought plan. The resources provide examples and discussions for developing an effective plan based on the system's water supply.

- [Drought Stage Planning for Community Water Systems](#)
 - Provides examples of drought stages and management measures for 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 community water systems.
- [System Water Plan Guidance document: pages 11-14](#)
- [Governor's Drought Task Force: Guidelines for Drought Response & Mitigation: pages ii-vi](#)

A. Contact Information

1. Facility Name: _____

Address: _____

Phone Number: _____

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

Name: _____

Position: _____

Phone Number: _____

B. Water Supply Stressors

Drought can stress a water system's supplies in different ways. Which of the following indicators do you monitor to determine when to initiate a drought stage for your system?

Please check all that apply.

- | | |
|--------------------------------------|--------------------------|
| Precipitation and weather forecasts | ☐ |
| Regional drought conditions | ☐ |
| Range and forage conditions | ☐ |
| Aquifer levels | ☐ |
| Well levels | ☐ |
| Streamflow levels | ☐ |
| Reservoir levels | ☐ |
| Population and/or agriculture growth | ☐ |
| Other (please describe): | ☐ |

C. Drought Plan of Action

Decide how many drought stages you will have for your water system. While ADWR suggests three or four stages, beginning with "Stage 0 – normal conditions", this tool is designed to be flexible. The drought stages are defined by the indicators (those you checked above in section B) and level of severity (triggers) you choose that are relevant to your water supply and individual system.

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 (see resources above), choose your own measures, or a combination of the two.

(Note: If you have a curtailment tariff in place, it may be submitted in place of the drought plan if it includes all the information in the pages in Part 2.)

- Indicators: Variables that describe the specific drought conditions that will cause stress to the system's water supply (as in section B above: such as ground water levels, reservoir levels, U.S. Drought Monitor).
- Triggers: The specific values of the indicators that initiate each stage of drought.
- Management Measures: The realistic plan of action which the system's management plans to undertake when drought impacts the system's water supply at each stage. These should be specific measures to **reduce water demands** based on the available supply.

Table 4. Drought Plan of Action

Drought Stage/Water Shortage Stage	Management Measures
Stage 0	(ex. reduce vulnerability)
Stage 1	(ex. raise awareness or voluntary reductions)
Stage 2	(ex. curtailment or eliminate non-essential water use)
Stage 3	(ex. stronger or mandatory measures)
Stage 4	
Additional Stage(s) and Measure(s)	

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

☐ Stage 0 – Normal Water Supply Conditions

☐ Stage 1

☐ Stage 2

☐ Stage 3

☐ Stage 4

☐ Higher Stage – Describe: _____

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

☐ Stage 0 – Normal Water Supply Conditions

☐ Stage 1

☐ Stage 2

☐ Stage 3

☐ Stage 4

☐ Higher Stage – Describe: _____

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

☐ No measures are ever mandatory

☐ Stage 0 – Normal Water Supply Conditions

☐ Stage 1

☐ Stage 2

☐ Stage 3

☐ Stage 4

☐ Higher Stage – Describe: _____

D. Implementation of Drought Water Shortage Stages

1. Who has the authority to initiate and/or change a drought/shortage stage for your system?

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

E. 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.

	Already implementing	Plan to implement
Information with water bill	☐	☐
Free publications	☐	☐
Media (social media, radio, TV)	☐	☐
Website	☐	☐
Public presentations	☐	☐
Workshops	☐	☐
Newsletters/e-newsletters	☐	☐
Text alerts	☐	☐
Other (please describe):		

2. How will customers be notified of a drought shortage stage declaration and implementation of associated management measures? **Note:** different stages of water supply stages 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	☐
Mail notice to service address	☐
Post signs at well sites	☐
Post signs at entrances to major subdivisions	☐
Information with water bill	☐
Community meetings	☐
Media (social media, radio, TV)	☐
Website	☐
Public presentations	☐
Newsletters/e-newsletters	☐
Text alerts	☐
Other (please describe):	

F. 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 all that apply.

- ☐ We do not have a backup supply
- ☐ Utilize interconnection, list provider: _____
- ☐ Haul water, from: _____
- ☐ Use backup well
- ☐ Provide bottled water (temporary response: less than 2 days)
- ☐ Drill new well
- ☐ Provide nonpotable water stations for nonpotable uses
- ☐ Other (please describe):

2. If you checked any of the possible backup supplies provided above, do you currently 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 all that apply.

- ☐ No augmentation needed
- ☐ Utilized interconnection, list provider: _____
- ☐ Hauled water
- ☐ Used backup well
- ☐ Provided bottled water
- ☐ Drilled new well
- ☐ Other (please describe):

Part 3: Water Conservation Plan

Community Water System Name/Number

The **Water Conservation Plan** must be designed to increase the Community Water System's efficiency, reduce waste, and encourage consumer conservation efforts. A good **Water Conservation Plan** can be the key to reducing a water system's vulnerability to drought and water shortages. A well-designed plan should include a balance of both demand- and supply-side measures. Supply-side programs, such as leak detection and repair, increase the water supply, while demand-side programs, such as higher seasonal rates, tend to reduce the demand for water. A long-term conservation program can result in significant cost savings to the water system; it can extend the life of existing infrastructure and delay the costs associated with building new facilities or retrofitting old facilities to handle larger capacities.

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.

There are number of resources to assist a water provider with conservation planning:

- [ADWR's Conservation Page](#)
- [Guidelines for Preparing Water Conservation Plans](#)

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 and feel free to add others

Conservation Measures (Best Management Practices)	Already implementing = ✓	Will implement in next 5 years = ✓
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.		
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/study customer water use efficiency		
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		
Researching a new technology or program		
Evaluating a new technology or program		
Implementing a new technology or program		
Explore opportunities for utilizing reclaimed effluent water		

Increase use of reclaimed effluent for commercial landscape		
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.

Name of the person preparing the form

Title

Signature of person preparing the form

Date Submitted

Telephone

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!

