

City of Peoria
***DROUGHT
CONTINGENCY
PLAN***

Preserve & Conserve
City of Peoria Water Conservation



Adopted May 2003

City of Peoria

**Drought
Contingency Plan**

Prepared by

Water Resource and Conservation Division

Utilities Department

May 2003



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Table of Contents

I.	Introduction.....	1
	A. Population Cluster Impact	1
	B. Economy	1
	C. Equity	1
	D. Preparedness.....	1
	E. Response to Citizens	1
	F. Water Resource Redundancy and Drought Impact.....	2
II.	Definitions.....	2
	A. Drought	2
	B. Supply Insufficiency.....	2
	C. Demand Reductions	2
	D. Potable Water.....	3
	E. Effluent.....	3
	F. Urban Irrigators.....	3
	G. Arizona Department of Water Resources (ADWR) Grandfathered Water Rights	3
	H. Ornamental Fountain.....	4
	I. Household Greywater.....	4
	J. Household Blackwater.....	4
III.	Purpose and Objectives	4
IV.	Goals.....	4
V.	Demand Management Options	5
	A. Public Education for Voluntary Reduction	5
	B. Increase Plumbing Retrofit and Rebate Programs	5
	C. Municipal Use Restrictions.....	5
	D. Outdoor Use Restrictions and Bans	6
	E. Water Theft Prevention.....	6
	F. Pricing Policies	7
	G. Moratorium on New Water Connections	7
	H. Physical Rationing and Mandatory Reductions.....	7
VI.	Water Use Restriction Stage Descriptions	8
	A. Stage One – Water Watch - Voluntary.....	8
	B. Stage Two – Water Alert.....	8
	C. Stage Three – Water Warning	8
	D. Stage Four – Water Emergency.....	8
VII.	Water Use Restriction Plan by Water Use Category	9
	A. Residential.....	9
	B. Commercial.....	10
	C. Industrial.....	11
	D. City of Peoria.....	12
	E. Essential Use Exemptions.....	14
VIII.	Mandatory Restriction Phase Implementation	14
IX.	Penalty	15
X.	Citations	15
XI.	Publication of Terms of Water Use.....	15

APPENDIX A: Water Demand Reduction Matrix

I. Introduction

The Drought Contingency Plan aims to supplement our Water Resources Master Plan. This plan adds procedures and strategies for when our redundant water supplies may not be able to meet our needs because of years of below normal rainfall, a meteorological drought, have finally caused a water supply drought. A Drought Contingency plan is yet another resource we can use should a meteorological drought last for several years. The Plan provides ways for the City, businesses, and our residents to aid in water demand reduction when a water supply drought occurs.

A. Population Cluster Impact

Drought impacts municipal water systems much more quickly and seriously than agriculture because of the more immediate and continuous demand for water in cities and towns. Population clustering means drought in the urban setting has a greater immediate impact on a larger number of persons. The threat of drought to the people, and to the urban economy, results in extensive media attention and scrutiny of drought plans and responses. The failure to plan for such shortages of water is irresponsible.

B. Economy

A drought plan establishes the criterion for action and in doing so can ensure the least possible impact on the citizenry and economy. The responsibility of a city in a desert climate must show that it has a plan to deal with the effects of drought to be able to continue to attract business.

C. Equity

Not all uses of water are the same. Some uses, such as reserves for fire suppression, critical cooling applications, and medical necessity will have to take priority over less universally beneficial applications of the available resource, such as lawn and park irrigation, maintenance of decorative fountains, and cooling of outdoor recreation areas.

D. Preparedness

A Drought Plan gives City leaders the opportunity to react quickly and implement appropriate restrictions early, while making allowances to suit every situations specific needs.

E. Response to Citizens

The City of Peoria wants be sensitive to the needs of its citizens and water customers and wants to be sure that business interest and residential customers have the opportunity to respond in the same manner should drought conditions arise.

F. Water Resource Redundancy and Drought Impact

The foresight and planning of valley and City leaders has provided us with a diverse water resource portfolio. This water resource redundancy largely prevents heavy restrictions and guides drought planning by providing a variety of water resources, including those that do not depend solely on precipitation in Arizona. The drought plan will work in accordance with this water resource planning to supplement the water resource master plan when necessary.

II. Definitions

A. Drought

Drought is a long period of abnormally low precipitation (rain or snow), especially one that adversely affects growing or living conditions. Drought can be caused by seasonal or multi-year weather conditions, a curtailment of delivery from raw water suppliers because of water quantity or quality problems, a supply deficiency due to water supply system structural failure, or any of a number of natural or man-made situations.

B. Supply Insufficiency

Supply insufficiency occurs when water available in an area is not sufficient to meet immediate unrestricted demand. While drought is usually systemic and regional in nature and of indeterminable length, a supply insufficiency may be system-wide or very localized, can be of relatively short duration, and may be caused by unforeseen increases in water demand or failure of a localized part of the storage or delivery system to provide a sufficient unrestricted supply of water.

C. Demand Reductions

Demand reductions are all measures taken by a water utility to reduce the use of potable water in response to drought or supply insufficiency conditions. While a number of water conservation measures may be implemented or accelerated during drought, not all water conservation is a response to drought and not all demand reduction measures are factors in a comprehensive water conservation program. Conservation, by its very nature, should be a normal component of a well-run water utility which seeks to maintain a reliable water resource. It should be an on-going practical application of good citizenship in the community. Demand reduction includes measures which would restrict water further than a normal conservation minded desert lifestyle.

Conservation programs are usually voluntary and are driven by a desire of the City of Peoria Utilities Department to extend the existing water supply, reduce the costs of finding and delivering additional water, and minimize the damage to the natural ecosystem caused by removing groundwater. For customers, conservation efforts can decrease overall household operating

expenses. For both the utility and customers, conservation activities are exercises in responsible behavior. Water demand reduction during a drought may incorporate both voluntary measures and mandatory ones, such as curtailment of irrigation water use and, in extreme cases, rationing of available supplies. Many of the organizational demand management responses to a drought condition, including conservation measures, are appropriate for responding to a short-duration supply insufficiency. Generally, responses to a systemic failure will be more rapid and may omit intermediate steps normally associated with an incremental drought response plan.

From areas which have experienced drought, it is evident that drought is not a constant or totally predictable condition in occurrence or duration. Rather, there are levels of drought and levels of drought impact, and therefore: levels of demand reduction response.

D. Potable Water

Potable water is water suitable or safe for drinking. Water is considered safe to drink if it meets or exceeds all of the federal, state, and provincial standards that are legally enforceable. If your water does not meet any one of these standards your supplier must notify their customers of the problem.

E. Effluent

Effluent is an outflow from a sewer or sewage system; reclaimed wastewater. Effluent that is reused is treated to a quality suitable for non-potable applications such as landscape irrigation, decorative water features, and non-food crops. Such water remains effluent until it acquires the characteristics of groundwater or surface water.

F. Urban Irrigators

Urban Irrigators are flood irrigators in Peoria and the rest of the valley who receive water directly from the Salt River Project canals to their residential landscape. This non-potable water floods their landscape controlled by berms. People who have this service live within the boundaries of former farmland, which had farmland irrigation water rights that still belong to the land.

G. Arizona Department of Water Resources (ADWR) Grandfathered Water Rights

ADWR grandfathered water rights are a provision in a statute exempting those already involved in a regulated activity from the new regulations in the statute. Those who have grandfathered water right from ADWR are in some respect, exempt from its 1980-groundwater management regulation. For Peoria, this means that some citizens within city limits are not regulated by City

code. These are regulated by the state. Golf courses are a good example of the grandfathered water rights use in Peoria.

H. Ornamental Fountain

An ornamental fountain is any fountain that is solely or partially used for decorative purposes.

I. Household Greywater

Household greywater is any potable water that passes through a residential shower, bathtub, bathroom sink, or washing machine.

J. Household Blackwater

Household blackwater is any potable water that passes through, but not limited to; a residential toilet, kitchen sink, dishwasher, or workshop sink.

III. Purpose and Objectives

- Coincide with Water Resources Master Plan
- Aid in citizen and economic security
- Determines water supply drought stages
- Provide authority and enforcement
- Establish flexibility and preparedness for leaders
- Establish the difference between the water conservation lifestyle and demand reduction drought response
- For the municipality to set example by reducing internal water demand before or more severely than citizenry in a drought response.

IV. Goals

- To protect public health and safety
- To provide sufficient water to meet the City of Peoria utilities customers
- To share the impacts and hardships caused by drought equitably and in proportion to the magnitude of the drought
- To minimize disruption of the economy so that jobs are protected and regional economic stability is preserved
- To provide competent implementation of demand reduction measures
- To provide options for updating or changing the Drought Plan by City Manager
- To enforce city code so that drought related water reduction goals will be met

V. Demand Management Options

A. Public Education for Voluntary Reduction

The goal of a good public education program is to generate an appropriate level of public awareness that results in the desired participation. They stress long-term management solutions, general awareness of water issues, and the recognition that Peoria is a desert city with a desert's limited supply of water. A demand reduction response in this category would provide extra funds made available for heightened awareness of drought and behavior modification to conserve water above and beyond our normal marketing, advertising efforts and public outreach events.

B. Increase Plumbing Retrofit and Rebate Programs

Once citizens are convinced of the need to save water, residential retrofit is one of the most practical and effective approaches in providing them with "how-to" information on altering their water use habits. At the same time, it provides them with the technology to save water with the least impact on their lifestyle. The greatest water savings can be achieved by combining the use of conservation devices with behavioral changes since these two actions tend to reinforce each other.

Also, allowing more customers to apply for xeriscape or hot water re-circulator rebates coinciding with a drought surcharge would reward those customers who may not have been eligible or able before to convert their lawn to xeriscape or install a hot water recirculator. More customers might choose to install a xeriscape or hot water re-circulator if the rebate dollar amount were doubled, or if the commercial, multi-family housing units, or industrial user were eligible for rebates.

Future programs must focus on in-home leak repair, complete replacement of toilets, and promotion of other water-using appliances such as water efficient washing machines and landscape timers. Programs to persuade the public to routinely check toilets for leakage might be worth pursuing, even as often as every three months. Incentives for installation of water efficient washing machines, landscape timers and other appliances might also be appropriate during drought.

C. Municipal Use Restrictions

One drought condition priority will be the evaluation of all city, county, state, and federal government water use in the service area. It is necessary to pursue an aggressive and publicly visible municipal use restriction program to convince the public that the impacts of drought are being handled equitably within the public sector. The City must visibly lead by example.

There is no faster way to undermine the effectiveness of a water demand reduction program than to allow flagrant and visible water waste in public facilities. The public sector strategy for controlling municipal use is to at a minimum strictly follow restrictions requested of consumers. The amount of municipal water use is relatively small. Restrictions are not expected to produce a large volume of savings. However, it is essential that steps be taken to establish the City as a leader in the drought effort, not merely a regulator of others' use of water.

Major water-using departments, divisions, and functions will be encouraged and assisted in developing drought responses based on this plan.

D. Outdoor Use Restrictions and Bans

Outdoor water use is a significant portion of everyday consumption in Peoria. Water consumption increases as much as 40 to 60 percent from March through October due to seasonal heat and cooling needs, and to a prolonged growing season in the desert environment. Drought certainly would have much more severe impact during these months, making restrictions and outright bans on outdoor water use of great impact.

Effective restrictions include time-of-day watering and odd/even lawn watering restrictions based on house numbering, or a combination of the two. In some California communities complete bans on all outdoor water use have been implemented. The potential loss of costly landscaping, and the impact to quality-of-life make complete bans an extreme measure.

Outdoor use restrictions help to reduce peak demand in the water treatment system, and improve water service pressure on maximum need days. The negative side of outdoor water use restrictions is that effectiveness diminishes over time, and enforcement is difficult and expensive. Peer pressure and citizen reports can help with enforcement, however, this can also have a negative "rat on your neighbor" effect.

In spite of enforcement difficulties, outdoor water use restrictions must be considered because of their potential benefits for early implementation and the water savings that can be derived. Implementation would require the commitment of resources to monitor violators and enforce restrictions. An appeal process is also necessary.

E. Water Theft Prevention

By Drought Stage Two (Water Alert), or earlier, an aggressive theft prevention program should be in the field to assist in maintaining full metering of fire hydrant use, and to evaluate appropriate field or construction water use. Again, nothing undercuts City credibility faster than the

perception that special classes of users -- in this case developers -- are getting preferential treatment.

F. Pricing Policies

An important concern created by a drought situation is the negative impact on revenues as a result of successful demand reduction. Such drops in revenue come at a time when operational expenses tend to increase. The establishment of financial systems to allow for fines, surcharges, or other measures to support programs such as extensive public education and the acquisition or development of new water supplies are required.

Charges for water consumption have significant influence on the amount of water consumed. If the drought condition continues to the point that voluntary conservation is not sufficient, the City would be forced to use alternative means to reduce water use during the critical period. The usual response in cities all across the country has been some form of rationing. There are various rationing plans to consider.

The surcharge amount would be determined at a drought stage based on the cost of services to implement water saving programs or acquisition costs necessary to meet reasonable water delivery demands. In Drought Stage Four, Water Emergency, the surcharge would be raised above revenue requirements specifically as a strong disincentive for use, until demand matches supply.

G. Moratorium on New Water Connections

Curtailing water demand by curtailing growth is a controversial option, but one that must be considered should the drought situation require extreme measures. If water supply status deteriorates and existing customers become impacted, it is inequitable to expect existing customers to make painful cuts in water use while new users are being added. This is a difficult issue since new users represent economic growth, both for Utilities Department and the City as a whole.

H. Physical Rationing and Mandatory Reductions

Sometimes a drought surcharge is used to ration water use economically. Price rationing, offers the consumer more flexibility in quality-of-life issues and has less impact on the revenue stream of the utility which has normal or higher-than-normal operational expenses during a drought.

Key elements of a successful rationing program are that: (1) the resources and the hardships are shared as equitably as possible, and (2) that customers are kept informed about the status of the shortage. However, allocation disagreements are to be expected and procedures to handle valid exceptions and variances need to be part of the rationing program. Pertinent information

regarding water use and supply must be published and disseminated at least weekly to continually reaffirm customer commitment.

Physical rationing programs are generally patterned after one of these basic allocation plans: percentage reduction and specific use bans. To better demonstrate the difficulty and expense which would be created by choosing to implement physical rationing for a utility the size of Peoria the various physical rationing plans are defined:

A percentage reduction assigns customers a consumption reduction goal, depending on water use, as a percentage of the consumption level used in a similar billing period during a normal season. Specific use bans are a rationing alternative; however, they do not increase or change the billing calculations. Instead they are imposed primarily through public education and enforcement. Specific use bans, such as lawn watering only every other day, prohibition on swimming pool filling, and prohibition on use of water features can be effective. Bans generate awareness and prioritizing of water use and they establish a sense of equity in the community.

VI. Water Use Restriction Stage Descriptions

A. Stage One – Water Watch - Voluntary

Stage One invokes voluntary compliance demand reduction measures, while mandatory reductions for the City of Peoria. The trigger is invoked in this stage when the possibility exists that the City Peoria Utilities Department will not be able to meet all of the water demands of its customers. This possibility includes reductions in allocations from either the Central Arizona Project or the Salt River Project (refer to Appendix A).

B. Stage Two – Water Alert

Stage Two invokes during periods when the probability exists that the City of Peoria Utilities Department will not be able to meet all of the water demands of its customers (refer to Appendix A).

C. Stage Three – Water Warning

Stage Three invokes during periods when the City of Peoria Utilities Department will not be able to meet all of the water demands of its customers. The demand reduction measures shall apply except when reclaimed water is used (refer to Appendix A).

D. Stage Four – Water Emergency

Stage Four invokes when a major failure of any supply or distribution facility, whether temporary or permanent, occurs in the water distribution system of the Salt River Project, Central Arizona Project, or the City of Peoria (refer to Appendix A).

VII. Water Use Restriction Plan by Water Use Category

A. Residential

1. Stage One - Water Watch - Voluntary

Goal: The goal of the Stage One voluntary restriction is to cause a demand reduction of water supplies by 5%.

- Outdoor water use from 8pm to 6am only; watering allowed on dates coordinating with your address. Even numbered addresses may water on even numbered days of the month. Odd numbered addresses may water on odd numbered day of the month. For places where there is no discernable address, the even date schedule shall apply (right-of-ways, medians, etc.)
- Automobile washing only with a bucket and hose with shut off nozzle or at carwashes that recycle or re-circulate water.
- No wasting of water as in defined 25-33 of Peoria Municipal Code.
- Turn off all non-greywater, non-effluent fountains unless part of an indoor cooling system; post that your fountain is either using greywater or effluent near the fountain. Drain fountains and do not refill. No new fountains approved.
- Sidewalks, driveways, parking areas, tennis courts, patios, or other similar paved surfaces may not be washed down with water.
- Cooling of outdoor areas with water or mist is prohibited.
- No fall overseeding unless effluent is used.
- Back washing of pools only allowed onto landscaping or to a water truck.

2. Stage Two - Water Alert

Goal: The goal of the Stage Two mandatory restriction is to cause a demand reduction of water supplies by 10%.

Voluntary restrictions in Stage One are now mandatory.

3. Stage Three - Water Warning

Goal: The goal of the Stage Three mandatory restriction is to cause a demand reduction of water supplies by 15%.

All of Stage Two restrictions apply with the following additions or modifications:

- Outdoor water use restricted to twice a week (Tuesday and Sunday).
- Only one construction meter given out for every two taken in.
- New home building permits may be curtailed.
- Drought surcharge will be introduced, amount will be a minimum of 125% or higher of base water rate. Surcharge will only apply to the volume of water used above a monthly target set by the City for each class of water user (residential, non-residential, etc.).

- ❑ May not fill or refill pools, artificial lakes, etc., exempt if effluent or raw water is used.
- ❑ Construction water use will be limited and water use and time only on approval by the Utilities Director.

4. Stage Four - Water Emergency

Water demand shall further be reduced by methods determined by City Manager.

All of Stage Three restrictions apply with the following additions or modifications:

- ❑ No new home building permits will be issued.

B. Commercial

1. Stage One - Water Watch - Voluntary

Goal: The goal of the Stage One voluntary restriction is to cause a demand reduction of water supplies by 5%.

- ❑ Outdoor water use from 8pm to 6am only; watering allowed on dates coordinating with your address. Even numbered addresses may water on even numbered days of the month. Odd numbered addresses may water on odd numbered day of the month. For places where there is no discernable address, the even date schedule shall apply (right-of-ways, medians, etc.)
- ❑ Automobile washing only with a bucket and hose with shut off nozzle or at car washes that recycle or re-circulates water.
- ❑ No wasting of water as in defined 25-33 of Peoria Municipal Code.
- ❑ Turn off all non-greywater, non-effluent fountains unless part of an indoor cooling system; post that your fountain is either using greywater or effluent near the fountain. Drain fountains and do not refill. No new fountains approved.
- ❑ Sidewalks, driveways, parking areas, tennis courts, patios, or other similar paved surfaces may not be washed down with water.
- ❑ Cooling of outdoor areas with water or mist is prohibited.
- ❑ No fall overseeding unless effluent is used.
- ❑ Back washing of pools only allowed onto landscaping or to a water truck.
- ❑ Restaurants must serve water to customers upon request only, display table tents or other types of public notice.
- ❑ Hotels to wash the same customer's linen on request only, provide public notice.

2. Stage Two - Water Alert

Goal: The goal of the Stage Two mandatory restriction is to cause a demand reduction of water supplies by 10%.

Voluntary restrictions in Stage One are now mandatory.

3. Stage Three - Water Warning

Goal: The goal of the Stage Three mandatory restriction is to cause a demand reduction of water supplies by 15%.

All of Stage Two restrictions apply with the following additions or modifications:

- Outdoor water use restricted to twice a week (Monday and Thursday).
- Only one construction meter given out for every two taken in.
- No commercial building permits will be issued if the business is a high water user.
- Drought surcharge will be introduced, amount will be a minimum of 125% or higher of base water rate. Surcharge will only apply to the volume of water used above a monthly target set by the City for each class of water user (residential, non-residential, etc.).
- May not fill or refill pools, artificial lakes, etc., exempt if effluent or raw water is used.
- Construction water use will be limited and water use and time only on approval by the Utilities Director.

4. Stage Four - Water Emergency

Water demand shall further be reduced by methods determined by City Manager.

All of Stage Three restrictions apply with the following additions or modifications:

- No new commercial building permits will be issued.

C. Industrial

1. Stage One - Water Watch - Voluntary

Goal: The goal of the Stage One voluntary restriction is to cause a demand reduction of water supplies by 5%.

- Outdoor water use from 8pm to 6am only; watering allowed on dates coordinating with your address. Even numbered addresses may water on even numbered days of the month. Odd numbered addresses may water on odd numbered day of the month. For places where there is no discernable address, the even date schedule shall apply (right-of-ways, medians, etc.).
- Automobile washing only with a bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water.
- No wasting of water as in defined 25-33 of Peoria Municipal Code.
- Turn off all non-greywater, non-effluent fountains unless part of an indoor cooling system; post that your fountain is either using greywater or effluent near the fountain. Drain fountains and do not refill. No new fountains approved.
- Sidewalks, driveways, parking areas, tennis courts, patios, or other similar paved surfaces may not be washed down with water.
- Cooling of outdoor areas with water or mist is prohibited.
- No fall overseeding unless effluent is used.
- Back washing of pools only allowed onto landscaping or to a water truck.

- ❑ Nurseries are encouraged to curtail water use by 5% and promote low water use plants.
- ❑ Car washes are encouraged to curtail water use by 5% and post signs if the car wash recycles or recirculates water.
- ❑ Golf courses and turf facilities must irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities watering with effluent or greywater.
- ❑ No trench compaction via water consolidation.

2. Stage Two - Water Alert

Goal: The goal of the Stage Two mandatory restriction is to cause a demand reduction of water supplies by 10%.

Voluntary restrictions in Stage One are now mandatory.

3. Stage Three - Water Warning

Goal: The goal of the Stage Three mandatory restriction is to cause a demand reduction of water supplies by 15%.

All of Stage Two restrictions apply with the following additions or modifications:

- ❑ Outdoor water use restricted to twice a week (Wednesday and Friday).
- ❑ Nurseries are encouraged to curtail water use by 10% and promote low water use plants.
- ❑ Car washes are encouraged to curtail water use by 10% and post signs if the car wash recycles or recirculates water.
- ❑ Golf courses and turf facilities must irrigate at 60% of base evapotranspiration. Exception for golf courses and turf facilities watering with effluent or greywater.
- ❑ Only one construction meter given out for every two taken in.
- ❑ No industrial building permits will be issued if the business is a high water user.
- ❑ Drought surcharge will be introduced, amount will be a minimum of 125% or higher of base water rate. Surcharge will only apply to the volume of water used above a monthly target set by the City for each class of water user (residential, non-residential, etc.).
- ❑ Construction water use will be limited and water use and time only on approval by the Utilities Director.

4. Stage Four - Water Emergency

Water demand shall further be reduced by methods determined by City Manager.

All of Stage Three restrictions apply with the following additions or modifications:

- ❑ No new industrial building permits will be issued.
- ❑ Golf courses and turf facilities to irrigate at 50% of base evapotranspiration.

D. City of Peoria

1. Stage One - Water Watch -Mandatory

Goal: The goal of the Stage One mandatory restriction is to cause a demand reduction of water supplies by 5%.

- ❑ Outdoor water use including landscape watering from 8pm to 6am only; Watering allowed on dates coordinating with your address. Even numbered addresses may water on even numbered days of the month. Odd numbered addresses may water on odd numbered days of the month. For places where there is no discernable address even date schedule shall apply (right-of-ways, medians, etc.)
- ❑ No wasting of water as in defined 25-33 of Peoria Municipal Code.
- ❑ Turn off all non-greywater, non-effluent fountains unless part of an indoor cooling system; post that your fountain is either using greywater or effluent near the fountain. Drain fountains and do not refill. No new fountains approved.
- ❑ Sidewalks, driveways, parking areas, tennis courts, patios, or other similar paved surfaces may not be washed down with water.
- ❑ Cooling of outdoor areas with water or mist is prohibited.
- ❑ No fall overseeding unless effluent is used. Peoria Sports Complex exempted.
- ❑ Back washing of pools only allowed onto landscaping, into sewer clean out valve, or draining permitted into a water truck for useful disposal.
- ❑ City car wash to curtail water use by 5% and post signs if the car wash recycles or recirculates water.
- ❑ Turf facilities, including parks, must irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities watering with effluent or greywater and Peoria Sports Complex.
- ❑ No trench compaction via water consolidation.

2. Stage Two - Water Alert

Goal: The goal of the Stage Two mandatory restriction is to cause a demand reduction of water supplies by 10%.

All of Stage One restrictions apply with the following additions or modifications:

- ❑ Street sweeping with water curtailed

3. Stage Three - Water Warning

Goal: The goal of the Stage Three mandatory restriction is to cause a demand reduction of water supplies by 15%.

- ❑ The Peoria Sports Complex is no longer exempt.
- ❑ Outdoor water use restricted to twice a week (Saturday and Wednesday).
- ❑ Turf facilities, including parks, must irrigate at 60% of base evapotranspiration. Exception for golf courses and turf facilities watering with effluent or greywater.
- ❑ No street sweeping with water.
- ❑ May not fill or re-fill artificial lakes, pools, etc.
- ❑ Backwashing of pools only on to landscaping or to a water truck for useful disposal.

- ❑ Drought surcharge will be introduced, amount will be a minimum of 125% or higher of base water rate. Surcharge will only apply to the volume of water used above a monthly target set by the City for each class of water user (residential, non-residential, etc.).
- ❑ Line flushing must be done to water trucks or landscaped area.
- ❑ Construction water use will be limited and water use and time only on approval by the Utilities Director.

4. Stage Four - Water Emergency

Water demand shall further be reduced by methods determined by City Manager.

All of Stage Three restrictions apply with the following additions or modifications:

- ❑ Turf facilities, including parks, must irrigate at 50% of base evapotranspiration. Exception for golf courses and turf facilities watering with effluent or greywater.
- ❑ No building permits for City structures will be issued.

E. Essential Use Exemptions

1. Stage One - Water Watch – Voluntary and Stage Two - Water Alert

- ❑ Any use to maintain the health, welfare and safety of the water customers of the City of Peoria are exempt from water use restrictions.
- ❑ Hospitals are exempt from water demand reduction restrictions.
- ❑ Sanitation trucks and any trucks used to carry food or perishables are exempt from car and truck washing restrictions.
- ❑ Immediate fire or sanitation hazards shall be exempt from water washing restrictions of sidewalks, driveways, parking areas, etc.
- ❑ Construction restrictions apply only to projects that are not necessary to maintaining the health, safety and welfare of the public.
- ❑ Appeals can be made on a case by case basis to City Manager.

2. Stage Three - Water Warning

All exemptions in Stage Two apply.

3. Stage Four - Water Emergency

All exemptions in Stage Two apply.

VIII. Mandatory Restriction Phase Implementation

The Utilities Department shall monitor the projected supply and demand for water, by its customers, on a daily basis during periods of emergency or drought and shall recommend to the City Manager the extent of the conservation required through the implementation and/or termination of particular conservation stages to prudently plan and supply water to its customers. Thereafter, the City Manager may order the implementation and/or termination of the appropriate phase of water conservation. The declaration of any

stage beyond Stage One shall be made by public announcement to the City Council and shall be published a minimum of one (1) time for three (3) consecutive days in a daily newspaper of general circulation. The stage designated shall become effective immediately upon announcement.

This implementation may require the reallocation of current staff to monitor external and internal water use and drought code enforcement. Alternatively, the City may hire temporary “water cops” to provide this enforcement.

IX. Penalty

It shall be unlawful for any person, corporation or association to violate the provisions of this Drought Plan. Violations of these provisions shall be a misdemeanor subject to penalties provided in Peoria Municipal Code or pursue any administrative remedy provided in City Code. First violation will be subject to a written warning to the water customer. Second violation will be \$100 fine. Third violation will result in a \$250 fine. The fine will increase in \$250 increments for each subsequent violation. In addition to any other remedies, water shall be discontinued or appropriately limited to any customer who willfully uses water in violation of any provision of the Division.

X. Citations

Code compliance officers/code compliance supervisors of the City of Peoria are hereby authorized, empowered and given the duty to enforce provisions of the Peoria Municipal Code and misdemeanors designated in the State Codes to issue citations for violations of said Codes under the provisions of the Penal Code of the State of Arizona when violations occur in the City of Peoria.

XI. Publication of Terms of Water Use

That upon such emergency declaration by the City Manager, it shall be his duty to have notice given to the City Council and public notice given by publishing a notice giving the extent, terms and conditions respecting the use and consumption of water, at least one (1) time for three (3) consecutive days in official newspapers of said City and to the City Council; that upon such declaration and publication of such notice due and proper notice shall be deemed to have been given each and every consumer supplied with water by the City of Peoria.

APPENDIX A

Drought Plan Water Demand Reduction Matrix

Stage 1 - Water Watch

	Residential	Commercial	Industrial	City of Peoria	Essential Use Exemptions
Stage 1 Voluntary (Reduction Goal 5%) (Mandatory for City uses)	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only 10. restaurants serve water only upon request, provide public notice 11. hotels to wash the same customer's linens on request only, provide public notice	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only 10. Nurseries to curtail water use by 5% and promote low water use plants 11. car washes to curtail water use by 5%, post if car wash recycles or recirculates water 12. golf courses and turf facilities to irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs 13. no trench compaction via water consolidation	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. no water waste pursuant to current Peoria code 4. fountains shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 5. washing down of sidewalks, driveways, parking lots, etc. prohibited 6. misting of outdoor areas is prohibited 7. no fall overseeding unless effluent is used (except Peoria Sports Complex) 8. back washing of pools on landscaping, into sewer or to a water truck for useful disposal 9. city car wash is required to curtail water use by 5%, post if car wash recycles or recirculates water. 10. city turf facilities, including parks, are to irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, and Peoria Sports Complex. Must post signs. 11. no trench compaction via water consolidation	1. any use to maintain the health, wealth, and safety of the water customers of City of Peoria are exempt from water use restrictions including hospitals 2. immediate fire or sanitation hazards are exempt from restrictions 3. immediate fire or sanitation hazards are exempt from restrictions 4. construction restrictions apply only to projects that are not necessary to maintaining the health, safety, and welfare of the public.
	*Stage 1 water use restrictions are voluntary, except for the City of Peoria				

APPENDIX A

Drought Plan Water Demand Reduction Matrix

Stage 2- Water Alert

	Residential	Commercial	Industrial	City of Peoria	Essential Use Exemptions
Stage 2 -Mandatory (Reduction Goal 10%)	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only 10. restaurants serve water only upon request, provide public notice 11. hotels to wash the same customer's linens on request only, provide public notice	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. automobile washing only with bucket and hose with shut off nozzle or at carwashes that recycles or re-circulates water 4. no water waste pursuant to current Peoria code 5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 6. washing down sidewalks, driveways, parking lots, etc. prohibited 7. misting of outdoor areas prohibited 8. no fall overseeding unless effluent is used 9. back washing of pools on landscaped portion of lot or to water truck only 10. Nurseries to curtail water use by 5% and promote low water use plants 11. car washes to curtail water use by 5%, post if car wash recycles or recirculates water 12. golf courses and turf facilities to irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs 13. no trench compaction via water consolidation	1.outdoor water use restricted to every other day 2.outdoor watering only from 8pm-6am 3. no water waste pursuant to current Peoria code 4. fountains shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted 5. washing down of sidewalks, driveways, parking lots, etc. prohibited 6. misting of outdoor areas is prohibited 7. no fall overseeding unless effluent is used (except Peoria Sports Complex) 8. back washing of city pools on landscaping, into sewer, or to a water truck for useful disposal 9. city car wash is required to curtail water use by 5%, post if car wash recycles or recirculates water. 10. city turf facilities, including parks, are to irrigate at 75% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs 11. no trench compaction via water consolidation 12. street sweeping with water to be curtailed	1. any use to maintain the health, wealth, and safety of the water customers of City of Peoria are exempt from water use restrictions including hospitals 2. sanitation trucks and any trucks used to carry food or perishables are exempt from truck washing restrictions 3. immediate fire or sanitation hazards are exempt from restrictions 4. construction restrictions apply only to projects that are not necessary to maintaining the health, safety, and welfare of the public. 5. appeals can be made on a case by case basis to City Manager.
*Stage 2 - All proposed water demand restrictions are mandatory					

APPENDIX A

Drought Plan Water Demand Reduction Matrix

Stage 3 - Water Warning

	Residential	Commercial	Industrial	City of Peoria	Essential Use Exemptions
<p>Stage 3 - Mandatory</p> <p>(Reduction Goal 15%)</p>	<p>1. outdoor water use restricted to twice a week (Sunday and Tuesday)</p> <p>2.outdoor watering only from 8pm-6am</p> <p>3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water</p> <p>4. no water waste pursuant to current Peoria code</p> <p>5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted</p> <p>6. washing down sidewalks, driveways, parking lots, etc. prohibited</p> <p>7. misting of outdoor areas prohibited</p> <p>8. no fall overseeding unless effluent is used</p> <p>9. back washing of pools on landscaped portion of lot or to water truck only</p> <p>10. construction meters restricted to only one meter given out for every two taken in.</p> <p>11. new home building permits may be curtailed</p> <p>12. drought surcharge on water bills implemented</p> <p>13. may not fill or refill pools artificial lakes, etc., exempt if effluent or raw water is used</p> <p>14. construction water use will be limited and water use and time only on approval by the Utilities Director</p>	<p>1. outdoor water use restricted to twice a week (Monday and Thursday)</p> <p>2.outdoor watering only from 8pm-6am</p> <p>3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water</p> <p>4. no water waste pursuant to current Peoria code</p> <p>5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted</p> <p>6. washing down sidewalks, driveways, parking lots, etc. prohibited</p> <p>7. misting of outdoor areas prohibited</p> <p>8. no fall overseeding unless effluent is used</p> <p>9. back washing of pools on landscaped portion of lot or to water truck only</p> <p>10. restaurants serve water only upon request, provide public notice</p> <p>11. hotels to wash the same customer's linens on request only, provide public notice</p> <p>12. construction meters restricted to only one meter given out for every two taken in.</p> <p>13. no commercial building permits will be issued if the business is a high water user</p> <p>14. drought surcharge on water bills implemented</p> <p>15. may not fill or refill pools, artificial lakes, etc., exempt if effluent or raw water is used</p> <p>16. construction water use will be limited and water use and time only on approval by the Utilities Director</p>	<p>1. outdoor water use restricted to twice a week(Wednesday and Friday)</p> <p>2.outdoor watering only from 8pm-6am</p> <p>3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water</p> <p>4. no water waste pursuant to current Peoria code</p> <p>5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted</p> <p>6. washing down sidewalks, driveways, parking lots, etc. prohibited</p> <p>7. misting of outdoor areas prohibited</p> <p>8. no fall overseeding unless effluent is used</p> <p>9. back washing of pools on landscaped portion of lot or to water truck only</p> <p>10. Nurseries to curtail water use by 10% and promote low water use plants</p> <p>11. car washes to curtail water use by 10%, post if car wash recycles or recirculates water</p> <p>12. golf courses and turf facilities to irrigate at 60% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs</p> <p>13. no trench compaction via water consolidation</p> <p>14. construction meters restricted to only one meter given out for every two taken in.</p> <p>15. no industrial building permits will be issued if the business is a high water user</p> <p>16. drought surcharge on water bills implemented</p> <p>17. construction water use will be limited and water use and time only on approval by the Utilities Director</p>	<p>1. outdoor water use restricted to twice a week (Saturday and Wednesday)</p> <p>2.outdoor watering only from 8pm-6am</p> <p>3. no water waste pursuant to current Peoria code</p> <p>4. fountains shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted</p> <p>5. washing down of sidewalks, driveways, parking lots, etc. prohibited</p> <p>6. misting of outdoor areas is prohibited</p> <p>7. no fall overseeding unless effluent is used</p> <p>8. back washing of pools on landscaping or to a water truck for useful disposal</p> <p>9. city car wash is required to curtail water use by 10%, post if car wash recycles or recirculates water.</p> <p>10. city turf facilities, including parks, are to irrigate at 60% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs</p> <p>11. no trench compaction via water consolidation</p> <p>12. No street sweeping with water</p> <p>13. may not fill or refill pools artificial lakes, etc., exempt if effluent or raw water is used</p> <p>14. drought surcharge on water bills implemented</p> <p>15. line flushing must be done to water trucks or landscapable area if feasible</p> <p>16. construction water use will be limited and water use and time only on approval by the Utilities Director</p>	<p>1. any use to maintain the health, wealth, and safety of the water customers of City of Peoria are exempt from water use restrictions including hospitals</p> <p>2. sanitation trucks and any trucks used to carry food or perishables are exempt from truck washing restrictions</p> <p>3. immediate fire or sanitation hazards are exempt</p> <p>4. construction restrictions apply only to projects that are not necessary to maintaining the health, safety, and welfare of the public</p> <p>5. appeals can be made on a case by case basis to City Manager.</p>
<p>* Stage 3 - All proposed water demand restrictions are mandatory</p>					

APPENDIX A

Drought Plan Water Demand Reduction Matrix

Stage 4 - Water Emergency

Stage 4 - Mandatory (Reduction Goal TBD by City Council)	Residential	Commercial	Industrial	City of Peoria	Essential Use Exemptions
	1. outdoor water use restricted to twice a week	1. outdoor water use restricted to twice a week	1. outdoor water use restricted to twice a week	1. outdoor water use restricted to twice a week	1. any use to maintain the health, wealth, and safety of the water customers of City of Peoria are exempt from water use restrictions including hospitals
	2. outdoor watering only from 8pm-6am	2. outdoor watering only from 8pm-6am	2. outdoor watering only from 8pm-6am	2. outdoor watering only from 8pm-6am	2. sanitation trucks and any trucks used to carry food or perishables are exempt from truck washing restrictions
	3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water	3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water	3. automobile washing only with bucket and hose with shut off nozzle or at car washes that recycles or re-circulates water	3. no water waste pursuant to current Peoria code	3. immediate fire or sanitation hazards are exempt from restrictions
	4. no water waste pursuant to current Peoria code	4. no water waste pursuant to current Peoria code	4. no water waste pursuant to current Peoria code	4. fountains shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted	4. construction restrictions apply only to projects that are not necessary to maintaining the health, safety, and welfare of the public
	5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted	5. fountain shut off, unless effluent is used or fountain is part of an indoor cooling system, either must be posted	5. fountain shut off requested, unless effluent is used or fountain is part of an indoor cooling system, either must be posted	5. washing down of sidewalks, driveways, parking lots, etc. prohibited	5. appeals can be made on a case by case basis to City Manager.
	6. washing down sidewalks, driveways, parking lots, etc. prohibited	6. washing down sidewalks, driveways, parking lots, etc. prohibited	6. washing down sidewalks, driveways, parking lots, etc. prohibited	6. misting of outdoor areas is prohibited	
	7. misting of outdoor areas prohibited	7. misting of outdoor areas prohibited	7. misting of outdoor areas prohibited	7. no fall overseeding unless effluent is used	
	8. no fall overseeding unless effluent is used	8. no fall overseeding unless effluent is used	8. no fall overseeding unless effluent is used	8. back washing of pools on landscaping or to a water truck for useful disposal	
	9. back washing of pools on landscaped portion of lot or to water truck only	9. back washing of pools on landscaped portion of lot or to water truck only	9. back washing of pools on landscaped portion of lot or to water truck only	9. city car wash is required to curtail water use by 10%, post if car wash recycles or recirculates water.	
	10. construction meters restricted to only one meter given out for every two taken in.	10. restaurants serve water only upon request, provide public notice	10. Nurseries to curtail water use by 10% and promote low water use plants	10. city turf facilities, including parks, are to irrigate at 50% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs	
	11. No new home building permits	11. hotels to wash the same customer's linens on request only, provide public notice	11. car washes to curtail water use by 10%, post if car wash recycles or recirculates water	11. no trench compaction via water consolidation	
	12. drought surcharge on water bills implemented	12. construction meters restricted to only one meter given out for every two taken in.	12. golf courses and turf facilities to irrigate at 50% of base evapotranspiration. Exception for golf courses and turf facilities that water with effluent, must post signs	12. No street sweeping with water	
	13. may not fill or refill pools artificial lakes, etc., exempt if effluent or raw water is used	13. no commercial building permits will be issued	13. no trench compaction via water consolidation	13. may not fill or refill pools artificial lakes, etc., exempt if effluent or raw water is used	
	14. construction water use will be limited and water use and time only on approval by the Utilities Director	14. drought surcharge on water bills implemented	14. construction meters restricted to only one meter given out for every two taken in.	14. drought surcharge on water bills implemented	
	15. Water demand shall be further reduced by methods determined by City Manager	15. may not fill or refill pools, artificial lakes, etc., exempt if effluent or raw water is used	15. no industrial building permits will be issued	15. line flushing must be done to water trucks or landscapable area if feasible	
		16. construction water use will be limited and water use and time only on approval by the Utilities Director	16. drought surcharge on water bills implemented	16. construction water use will be limited and water use and time only on approval by the Utilities Director	
		17. Water demand shall be further reduced by methods determined by City Manager	17. construction water use will be limited and water use and time only on approval by the Utilities Director	17. No building permits for City structures will be issued.	
			18. Water demand shall be further reduced by methods determined by City Manager	18. Water demand shall be further reduced by methods determined by City Manager	

* Stage 4 - All proposed water demand restrictions are mandatory