Water Conservation

Northwest Basins Planning Area
John Riggins
jrriggins@azwater.gov
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Additional Information on our Website

Technologies updates:
- EPA WaterSense info
- Heating & Cooling
- Pools, Spas & Water Features

Water Conservation Tips for Arizona Residents

Info for Water Planners & Providers

Residential water conservation
- Indoor, outdoor, graywater & rainwater harvesting

Commercial, Industrial & Institutional info
- AMA conservation requirements for Industrial water users
- Best Management Practices

Agricultural Conservation
- AMAs conservation requirements

Landscape professionals
- Irrigation & Plant list

Water Conservation Education & Outreach
- Activities & resources for students
- Resources & Workshops

Additional Information on Water

ARIZONA WATER FACTS

WATER YOUR FACTS
Arizona leads the nation in comprehensive water supply management.
LEARN MORE

DO WE HAVE ENOUGH?
Arizona has developed a diverse portfolio of water supplies and management strategies which serve as the foundation of our State’s robust water system, however we are not without challenges.
LEARN MORE

WATER BUILDS OUR ECONOMY
A stable secure long-term water supply is the foundation on which Arizona’s growing economy is built.
LEARN MORE

HOW CAN I HELP?
We must all do our part to conserve and protect our most precious resource.
LEARN MORE

IN THE NEWS
http://www.arizonawaterfacts.com/
Arizona’s Water Management Success


- Arizona Gross Domestic Income
- Population
- Water Use (Acre-Feet)

Source: ADWR, 2015
Why Conserve?

❖ Northwest Basins Planning Area:
  ❖ Mohave Desert
  ❖ Sonoran Desert

❖ Kingman, AZ annual precipitation (inches)
  ❖ 10.35” (1901-2003),

❖ Yucca, AZ annual precipitation (inches)
  ❖ 7.60” (1950-2005),

❖ The Planning Area is in an arid transitional desert between the Mohave and Sonoran Deserts

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Arizona Climate Summaries; Western Regional Climate Center; Period of Record: 5/1/1901 to 6/30/2003; http://www.wrcc.dri.edu/summary/climsmaz.html

Period of Record Monthly Climate Summary; Yucca, Arizona 1/31/1950-12/31/2005; http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?azyucc
Water Companies with ACC Water Conservation Tariffs

The Arizona Corporation Commission may require a water company to implement a Best Management Practice (BMP)

These Practices are selected from the Arizona Department of Water Resources list of BMPs

BMPs include: Public education, leak detection programs, water system audits, large landscape conservation programs and many more

* See the ACC Link below for a complete list of BMPs offered

Nine water systems in the Northwest Basins Planning Area are regulated by the ACC

ACC Link: http://www.azcc.gov/divisions/utilities/water/forms.asp
The Community Water System offer water conservation measures & BMPs
  * Can reduce water use, improve water efficiency and enhance drought preparedness

Conservation Measures include:
  * Metering wells
  * Leak detection & repair
  * Meter testing, repair and replacement
  * Public education
  * Residential audit program
  * Home leak repair advice
  * High water use notification
  * Many others can be found on the Arizona Department of Water Resources Community Water Systems information webpage:
    * http://www.azwater.gov/AzDWR/StatewidePlanning/drought/CWS.htm
City of Kingman Water Conservation

- Conservation tips and education provided
- City wells and service connections are metered
- Water rate structure encourages efficient water use
  - Higher rates for higher uses

### WATER RATES (Within City Limits) [EFFECTIVE 07/01/2013]

Residential water charges are based on consumption using the tiered rate structure below.

* SLSTX – Sales Tax of 8.35% is added to all water sales
** SITAX – State imposed surcharge on water consumption at a rate of .0066 x 1,000 gallons

#### RESIDENTIAL - WATER

<table>
<thead>
<tr>
<th>Monthly Rate Blocks (per 1,000 gallons)</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10,000 gallons</td>
<td>$1.93</td>
</tr>
<tr>
<td>10,001 to 40,000 gallons</td>
<td>$2.42</td>
</tr>
<tr>
<td>45,001 gallons and over</td>
<td>$3.64</td>
</tr>
</tbody>
</table>

#### NON-RESIDENTIAL - WATER

<table>
<thead>
<tr>
<th>Monthly Rate Blocks (per 1,000 gallons)</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL Usage</td>
<td>$2.18</td>
</tr>
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</table>

#### IRRIGATION - WATER

<table>
<thead>
<tr>
<th>Monthly Rate Blocks (per 1,000 gallons)</th>
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#### HYDRANT METERS - WATER

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<tr>
<td>0 to 200,000</td>
<td>$3.28</td>
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<tr>
<td>200,001 gallons and over</td>
<td>$4.91</td>
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#### BASE RATES - WATER

<table>
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<th>Rate Type</th>
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<tbody>
<tr>
<td>BASE RATES (monthly)</td>
<td></td>
</tr>
<tr>
<td>BASE RATE - ALL METER SIZES</td>
<td>$7.21</td>
</tr>
<tr>
<td>CAPITAL RENEWAL FEE</td>
<td>$3.75</td>
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### WATER RATES (Outside City Limits)

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Conserve in Your Community

* Support projects that use reclaimed wastewater for irrigation and other uses
* Encourage friends and neighbors to be more water conscious
* Teach children the importance of using water efficiently
* Do one thing every day to save water
Industrial Water Conservation

Kingman Wind Farm & Nucor Steel, Sacramento Basin
Griffith Energy Plant:

- Natural Gas Power Plant in Sacramento Basin
- The plant is a zero discharge facility
- Uses Clarifiers, Reverse Osmosis Filters and two evaporation ponds
- Raw Water Treatment system and closed loop condenser system

Source: Star West Griffith Energy Power Plant Information; http://www.starwestgen.com/2013/06/griffith-power-plant/
* More information on turf water conservation can be found:  

* Install efficient landscape watering systems
* Minimize the amount of turf
* Use low water use plants for other landscaping
* Apply mulch around landscaping to reduce evaporation
* Proper soil preparation
* Use reclaimed water
Questions?

Arizona Water Initiative
Northwest Basins Planning Area

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