



# Staff Report

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Agenda Item:           **WORKSESSION WATER CONSERVATION CODE –**  
Discussion and possible direction to staff on policy issues  
associated with the Town's Water Conservation Code.

Staff Contact:         Sherry Bailey  
Community Development Director

Meeting Date:         April 22, 2008

Background:

Staff had presented to council a proposal to do the research and to write the Water Conservation Ordinance for the town. After researching numerous programs in Arizona and surrounding states, it has become clear to staff that a successful program is just that...a program. It includes a strong commitment to replacing aged and leaking infrastructure through an aggressive Capital Improvements Program. It requires a conservation ordinance that addresses the local issues, sometimes in a very controversial manner that confronts both local attitudes and morays. Third, it requires a continuing education program to keep water conservation in the public eye. A successful program also provides incentives to the public to change their habits and to reward them for actions they have taken to meet the ordinance.

Staff has selected the policy questions and program framework for review and direction by council. There are some tough policy questions in this proposal. Once we have narrowed down the direction council wants the program to take, we will start working with the public and then staff will return with the entire ordinance for another council worksession and review. After final direction, the ordinance will come back to council for approval.

Recommendation:

This is a worksession only and requires no action. Direction to staff on the project is requested.

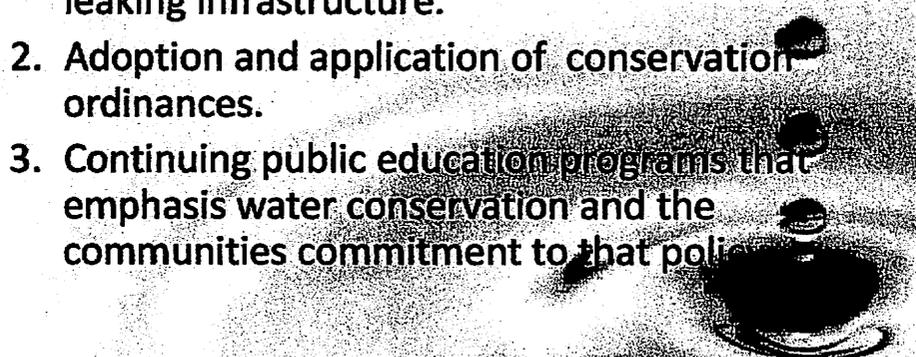
# Water Conservation Program

For the

## **TOWN OF CLARKDALE**



### **SUCCESSFUL PROGRAMS FROM OTHER COMMUNITIES HAVE A THREE STEP APPROACH**

1. Aggressive CIP program that replaces existing leaking infrastructure.
  2. Adoption and application of conservation ordinances.
  3. Continuing public education programs that emphasis water conservation and the communities commitment to that policy.
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## **CIP PROGRAM**

- Next year and successive years an aggressive CIP program will be presented to council to address the aged infrastructure issues.
  - The goal is to have less than a 10% water loss.
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## **Conservation Ordinance**

- Declaration of Policy
    - Conservation of water is in the best interests of the Town of Clarkdale and its citizens; and it promotes the health, safety and welfare of its citizens.
    - It is necessary for the Town of Clarkdale to protect its limited water supply and to allocate and monitor water usage to both existing and future development within its jurisdictional boundaries in order to ensure the sustainability of the Town's water resources.
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- Declaration of policy continued:
- It is necessary for the Town of Clarkdale to encourage and implement conservation measures as they pertain to water usage and allocation in order to prevent the wasting of water and promote efficient water use.
- An aggressive strategy which achieves a 30% reduction in water usage in six to ten years will reduce the current average gallons per capita per day to 70 gallons per capita per day and is estimated to reduce water demand in the year 2014 by 83,000 gallons a day.
- It shall be unlawful for any resident of the Town of Clarkdale to knowingly make, cause, use, or permit the use of water for residential, commercial, industrial, agricultural or any other purpose in a manner contrary to the provisions of this Article, or in an amount in excess of that use permitted under the water conservation level established in accordance with this Article.

### SCOPE

- The provisions of this chapter shall apply to all residents of the Town and/or users of Town provided utilities.

### New Construction

- All new construction shall comply with the International Code Council, or other approved standards for water conserving plumbing fixtures installed in strict accordance with the manufacturer's instructions to maintain their rated performance.

### New Construction continued:

- *Evaporative coolers.* The use of evaporative coolers is prohibited, except as provided in the town building codes or otherwise authorized by the Building Official when appropriate to maintain adequate health and manufacturing standards.
- All new construction shall provide for the capture of drainage from a minimum of 85% of the roofed area.
  - 2,500 sq. ft. of heated area or greater shall install a cistern that is buried and is connected to a pump and a drip irrigation system to serve landscaped areas.
  - smaller than 2,500 sq.ft. of heated area shall install rain barrels, cisterns or other water catchment devices.

## RETROFIT

- All plumbing fixtures in existing structures, including residential, commercial, industrial, and public authority structures shall, at the time of change of use, be retrofitted, exclusively with low water-use plumbing fixtures as defined by this ordinance.
- Retrofitted structures may qualify for a retrofit credit.
- All structures, including residential, commercial, public authority and industrial reconstruction, remodels or additions that add any bathroom [s], and/or increase in floor area of existing structures by twenty-five [25] percent or greater of the existing floor area shall meet new construction low water-use plumbing fixtures within existing structures.

## **Landscape Material Restriction** **Single Family and Multi-family**

- The installation of new turf is prohibited in residential front yards.
- Native vegetation is required for front yards. Plants requiring longer than two years of watering, to establish, are prohibited.
- There shall be no waivers or variances granted to the standards listed in this section. Such a request shall be considered a request to amend the requirements of this section and shall only be considered in accordance with the proper procedure
- Single-family and multi-family developments are prohibited from installing new turf in common areas of residential neighborhoods except for parks either public or private
- For single-family residential lots, the installation of new turf shall not exceed fifty percent of the gross area side and rear yard, or one thousand square feet.

## **Non-residential Landscape Requirements**

- The installation of new turf in non-residential developments is limited to fifteen percent of the required landscapable area, provided that no turf area dimension is less than ten feet or subsurface irrigation is used. These provisions shall not apply to public or private schools and parks.
- There shall be no waivers or variances granted to the standards listed in this section. Such a request shall be considered a request to amend the requirements of this section and shall only be considered in accordance with the proper procedure.

## **Prohibitions That Apply To Potable Water Usage**

- *Artificial water features.* New artificial water features such as ponds, lakes, water courses, and other types of water features larger than 50 gallons capacity are prohibited. Water features less than 50 gallons capacity must be equipped with a recirculating pump.
- *Spray irrigation.* New plantings that require spray irrigation are prohibited.
- *Use of misters.* The use of misters is prohibited.
- *Swimming pools.* The construction of new outdoor swimming pools is prohibited.
- *Spas.* The construction or installation of new spas in or adjacent to motel, hotel, and bed and breakfast rooms is prohibited.

## **Public Education and Credit Program**

- For single-family residential credit, you will receive a water bill credit of \$0.60 for every square foot of qualifying landscape up to 2,000 square feet. You must convert a minimum of 500 square feet to participate.
- For multifamily (apartment) and nonresidential credit, you will receive a water bill credit of \$0.60 for every square foot of qualifying landscape up to 12,500 square feet. You must convert a minimum of 500 square feet to participate.

## Rainwater Harvesting Credits

- The credit amount has increased to \$1.20 per square foot. The minimum is 500 square feet, and the maximum is 2000 square feet for eligible landscape conversions.
- All of the plants must be from the low water use designation on the Rainwater Harvest Plant List. These plants are native or xeric adapted to live on the 13 inches of natural rainfall that occurs in Clarkdale. A rainwater collection or direction system must also be a part of the plan, which must be approved by the Water Utility's Xeriscape Inspector. In order to allow for root establishment and development, supplemental irrigation is allowed for a two year period for shrubs and grasses, and a three year period for trees.

## Retrofitted Structures or Low Water Use Appliance Rebate Program

- Those who are required to retrofit fixtures or choose to replace appliances with low water use appliances will receive a credit on their water bill based on the following schedule:
- Commercial:
  - Low water use washers [25 gallons or less] \$500
  - High efficiency toilets [1 gallon or less] \$200
- Residential:
  - Low water use washers [25 gallons per wash or less] \$500 credit
  - Low flow toilets [ 1.6 gallons ] \$125
  - High efficiency toilets [1 gallon or less] \$200

## **Water Audits**

- Free commercial and residential water audits
  - a water balance
  - opportunities for water conservation
  - and estimated payback periods for each recommended conservation measure.

