

Water Conservation Task Force Executive Summary

When properly executed, water conservation practices can save thousands of gallons of water per person per year.¹

Although almost 80 percent of Earth is covered with water, only 3 percent of the planet's water resources represent fresh water. Less than 1 percent of all water is available for human consumption; the rest is salty ocean water, or freshwater that is bound up in glaciers and polar ice caps. Of the water available to humans, animals, and plants, only a tiny fraction is used as drinking water. Most of what is consumed is used to create electricity, grow crops, run factories, and supply household and sanitation needs.

Global water consumption rose almost tenfold in the last century, and many parts of the world are now reaching the limits of their supply. Populations continue to increase while water supplies dwindle. To highlight this growing problem the United Nations declared 2003 to be the International Year of Freshwater. According to the U.N., if the current trends continue, "two out of every three people on earth will suffer moderate to severe water shortages in little more than two decades from now. Globally, one in six people will have no access to safe drinking water, and more than twice that number (2.4 billion) lack access to adequate sanitation facilities."

The problem is local as well as global. Arizona, except for LaPaz County, was been declared a Primary Natural Disaster Area. In the desert Southwest, drought combined with depleted stores of groundwater and burgeoning Sunbelt populations are putting unprecedented strains on the water supply. Water is in demand for a myriad of uses: recreational, mining and industry, fishing, irrigation, and riparian habitat preservation, among others. In the U.S. almost 100 gallons per day of drinking water are used per capita.

In 2003, the U.S. Department of the Interior acknowledged that the semi-arid West faces particular challenges. In its report, Water 2025: Preventing Crises and Conflict in the West, DOI concedes that "today, in some areas of the West, existing water supplies are, or will be, inadequate to meet the water demands of people, cities, farms, and the environment even under normal water supply conditions."¹

The Town of Payson has programs and resources available that place Payson ahead of many communities in Arizona and the Southwest. However, the Water Task Force is concerned that some materials are out dated, and need revision. In addition, the Water Task Force recommends that several initiatives be developed to provide clear information, understanding, and incentives for water conservation for the citizens of the Town of Payson and the Rim Country.

¹ SAHRA –www.sahra.Arizona.edu

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EXHIBIT "B"
to Resolution No. 2249

There is no higher quality source of water available to us than rainwater. Unlike water captured in dams that requires an extensive treatment process to ensure a quality fit for human consumption, rainwater that is collected on roofs and stored appropriately represents a sustainable source of water ideal for use inside and outside the home.

Harvesting water from a 2000 sq foot roof delivers 1,246 gallons of water for every inch of rainfall.

Dish, shower, sink and laundry water comprise 50-80% of residential "waste" water. This water may be used for other purposes. By using rainwater for toilet flushing, laundry and garden use alone, it can reduce water requirements of a typical household by 70%. If hot water systems are supplied with rainwater, this reduction can be as high as 85%². Governments in many areas of the world are encouraging more wide spread use of rainwater in the home. In Australia some areas have moved to require the construction on new homes to include rainwater tanks and systems to supply water for toilet flushing, laundry and outside uses. Many local governments are providing rebates to homeowners that install rainwater systems into new or existing buildings. **This should be a consideration for the Town of Payson.**

By using Rainwater Harvesting systems to supply water for some, or indeed most of our water requirements, we can reduce our dependence on ground water. Our water supply is falling due to an extended drought and additional steps must be taken to reduce our overall water usage and protect our limited ground water supply.

Rainwater is free and once a home or business has installed a rain harvesting system they can be less dependent on town water and can reduce their water bills. We can only expect that water will be more expensive to obtain and use in the future. This has already been realized as the costs of obtaining water from Blue Ridge Reservoir are estimated. Ultimately as taxpayers we pay the cost of development of addition sources of water.

Xeric (low water) plants use about 1/3 the water of the high water plants and 1/2 the water of the medium water plants. Many xeric plants can survive without any water other than normal precipitation.

Hot water recirculation systems can save over 16000 gallons of water per year for the average household.

Additional conservations measures should be an immediate consideration for the Mayor, the Town Council and Town of Payson.

Recommendations:

- **Enforce or revise Resolution #1742 and all of its subsections**
- **Develop recommendations and standards for Rain Water Harvesting Grey Water usage and Hot Water Recirculation for the Town of Payson. Include revisions of the building code to require these practices.**
- **Provide incentives - Benchmark one of the incentive programs listed in the Xeriscape section of this report and design a similar program for the Payson area. Provide similar incentives for Rain Water Harvesting, Grey Water Systems, and Hot Water Recirculation systems. (Re: Tempe, Scottsdale and other Arizona Cities)**
- **Provide information and incentives to retrofit existing houses and business for water conservation.**
- **Update the information at the Town of Payson Water Department**
- **Establish a common xeric plant list with the High Country Xeriscape Council.**

- **Provide the Xeriscape information to all plant retailers in the area for dissemination to the public**
- **Provide water conservation information to the Chamber of Commerce for dissemination to the public**
- **Improve the area surrounding the Town of Payson, signs and the roundabout to reflect colorful xeric plantings.**
- **Provide an area in the library where Water Conservation and Xeriscape information to be made available.**
- **Develop and publish local Rainwater statistics for use in water harvesting system design.**
- **Provide a link to <http://www.xeriscapeaz.org/> on the Water Department Conservation page of the Town of Payson web site.**

²Rainharvesting.com

RESOLUTION NO. 2249

A RESOLUTION OF THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA, ACCEPTING THE CITIZEN WATER CONSERVATION TASK FORCE REPORT DATED AUGUST 2006 AND DIRECTING A REVIEW AND EVALUATION FOR IMPLEMENTATION OF RECOMMENDATIONS.

WHEREAS, the Water Conservation Task Force is a group of citizens (the "Citizens") who voluntarily examined existing and potential water conservation activities in the Town of Payson; and

WHEREAS, the Citizens developed a water conservation report (the "Citizens' Report") and made a presentation thereon to the Mayor and Common Council; and

WHEREAS, the United States Department of Agriculture has designated Gila County, and the State of Arizona, as a primary natural disaster area because of losses caused by the continuing drought dating from at least January 1, 2006; and

WHEREAS, a copy of the disaster designation letter from Mike Johanns, Secretary, United States Department of Agriculture, is attached hereto as Exhibit "A"; and

WHEREAS, an executive summary of the Water Conservation Task Force report is attached hereto as Exhibit "B"; and

WHEREAS, water conservation is important to the Town of Payson, and the Town of Payson desires to evaluate its existing water conservation initiatives and to develop appropriate new water conservation initiatives,

NOW, THEREFORE, THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA, DO HEREBY RESOLVE AS FOLLOWS:

Section 1. That the Citizens' Report dated August 2006 be and is hereby accepted by the Town of Payson.

Section 2. That the Town of Payson, by and through its appropriate staff, is hereby directed to review and evaluate the recommendations and conclusions contained in the Citizens' Report, to implement the same where feasible, and to report to the Town Council concerning which recommendations have been or should be implemented and which recommendations, in staff's view, cannot or should not be implemented.

Prepared by Town of Payson Legal Department

SIS:drs March 7, 2007 (10:16AM)

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Page 1

MAR 15 2007 GL 6
APR 05 2007 GL 3

Section 3. A copy of the Citizens' Report dated August 2006 shall be maintained in the Office of the Town Clerk and made available to citizens upon request by the Town Clerk, the Community Development Department, and the Water department.

Section 4. That the Town of Payson be and is hereby authorized to take and perform such other and further actions as are necessary or appropriate to carrying out the purposes provided for in this Resolution Number 2249.

Section 5. If any section, subsection, sentence, clause, phrase or portion of this Resolution Number 2249 is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Resolution.

PASSED AND ADOPTED BY THE MAYOR AND COMMON COUNCIL OF THE TOWN OF PAYSON, ARIZONA, this _____ day of _____, 2007, by the following vote:

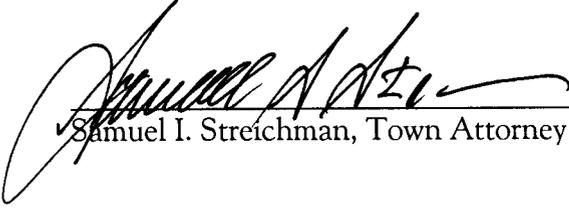
AYES _____ NOES _____ ABSTENTIONS _____ ABSENT _____

F. Robert Edwards, Mayor

ATTEST:

APPROVED AS TO FORM:

Silvia Smith, Town Clerk



Samuel I. Streichman, Town Attorney



United States Department of Agriculture

Office of the Secretary
Washington, D.C. 20250

MAY 9 2006

The Honorable Janet Napolitano
Governor
State of Arizona
Phoenix, Arizona 85007

Dear Governor Napolitano:

This is in response to your letter of March 7, 2006, requesting a disaster designation for the entire State of Arizona due to losses caused by drought that occurred from January 1, 2006, and continuing.

The Department of Agriculture (USDA) has reviewed the Damage Assessment Report, along with additional information submitted by the State Executive Director, Farm Service Agency (FSA). Based on this review, USDA has determined that there were sufficient production losses in all Arizona counties, except La Paz County, to warrant a Secretarial natural disaster designation. Therefore, I am designating all counties in the State of Arizona, except La Paz County, as primary natural disaster areas.

In accordance with section 321(a) of the Consolidated Farm and Rural Development Act, La Paz County is named as a contiguous disaster county.

We were unable to confirm that sufficient production losses occurred in La Paz County. There were no qualifying losses in La Paz County due to the natural disaster. Therefore, I am unable to approve your request for the designation of La Paz County as a primary natural disaster area.

However, La Paz County will be eligible for FSA emergency loan assistance, as a contiguous county for this disaster, as indicated above.

This designation makes farm operators in both primary and contiguous counties eligible to be considered for low-interest emergency loans from FSA, provided eligibility requirements are met. FSA will consider each application on its own merit by taking into account the extent of losses, security available, and repayment ability.

Local FSA offices can provide affected farmers with further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Johanns".

Mike Johanns
Secretary