

TO: James L. App, City Manager

FROM: Doug Monn, Public Works Director

SUBJECT: Proposed 2010 Water Conservation Programs

DATE: February 16, 2010

NEEDS: For City Council to adopt a comprehensive water conservation program for calendar year 2010 and beyond.

- FACTS:**
1. Mandatory Level 2 watering restrictions and outreach programs briefly achieved a 20 percent reduction in peak demand in summer 2009. However, conservation is not holding at 20%, so additional programs to assist water users in making permanent investments in water conservation technology and landscaping changes are needed.
 2. SB 7 (No. 7) recently signed into law requires cities to reduce annual per capita water demand by 20 percent by the year 2020 (20 x 2020 requirement). Achieving and maintaining this goal will require significant and sustained reductions in use. If the community does not achieve this target, it will not be eligible for state water management grants and low-interest loans.
 3. AB 1420 recently amended the Urban Water Management Planning Act to require that the eligibility for state water-related grants and loans be conditioned on the implementation of the 14 water demand management measures (DMMs) described in the California Urban Water Conservation Council's Memorandum of Understanding. The City is considering becoming a member of the Council and signing the Memorandum of Understanding. Implementation of the customer audit and financial incentive programs described below will enable the City to address all of the DMMs included in the Memorandum of Understanding.
 4. Increased conservation can aid water users in reducing their water consumption costs.

ANALYSIS &

CONCLUSION: The City has conducted water conservation outreach programs for several years, and implemented mandatory watering restrictions in 2009. The programs described here include continuing existing programs and implementing additional programs to meet the City's long-term water resources goals and to comply with state water conservation mandates.

Customer Water Survey Program for Homes and Businesses (Water Audits)

This new program would provide a free service to residential and commercial accounts. Studies of residential customer account usage following indoor and outdoor water use surveys indicate average water savings of 8,500 gal./year or more.

Staffing Level – A part-time temporary staff person at the Water Conservation Assistant level would be assigned to perform the surveys. Surveys are projected to take 1-1.5 hours each plus follow-up. Approximately 9-10 surveys per week could be performed, including travel time and record keeping. The number of surveys done each week would vary, with activity focused during the irrigation season. Estimated Annual Program Cost - \$22,000 (includes temporary staff, materials, marketing).

Customer Financial Incentive (Rebate) Program – Toilet Replacement and Landscape Retrofits

This new program would offer up to a \$125 rebate to customers for installation of 1.3 gallon per flush (HET) or dual flush toilet. A landscape retrofit incentive of \$0.50/s.f. of turf removal and installation of low-water-use landscaping would be offered, to a maximum of \$500 per customer. The estimated annual water savings per year for each toilet replacement is 12,800 gal./year. It is estimated that each 1,000 square feet of turf converted to low-water-use plants will save over 20,000 gal./year. It is proposed that \$18,000 be budgeted for these two incentive programs. This amount would provide for approximately 50 toilet rebates and 30 cash-for-grass rebates per year. Funds could be shifted among the two programs depending on customer demand. Since the City implemented Level 2 mandatory water conservation programs, staff has received numerous inquiries regarding the availability of financial incentives. Program administration would be handled by existing staff with assistance from temporary staff hired to do customer surveys. Estimated Annual Cost - \$18,000.

Enforcement Staffing for Level 2 Mandatory Watering Restrictions – To achieve compliance with landscape watering restrictions and a 20 percent reduction in peak season water use in 2010, 2 part-time staff @ 25 hours per week for the May 1 to Oct. 15 period will be required. Existing Public Works Department vehicles will be used for part-time staff. Estimated staffing cost: \$21,000.

Public Outreach Activities – Continued outreach is planned as follows, including:

- Conduct 3-4 educational workshops on low-water landscape conversion and other topics.
- Print ads in local newspapers and magazines
- Radio spots
- Bill stuffers: 3-4 color inserts per year to advertise programs and promote conservation.
- Direct Mail informing customers of reinstatement of mandatory restrictions May 1, 2010.
- Print and distribute 4 door hangers over peak season
- Signage – banner signage
- Purchases of additional brochures and outreach material as needed.
- Continue school education program classroom presentations by water education consultant.
- Maintain and improve water conservation website.
- Annual dues to California Urban Water Conservation Council

Estimated Annual Outreach Budget - \$60,000

Calendar Year 2010 Conservation Program Costs and Benefits

The conservation program would be funded through the water enterprise reserve fund. The total estimated level of commitment annually is \$121,000.

The proposed 2010 conservation programs are designed to meet the City's short and long-term water resources objectives and comply with state mandates. The new financial incentive and customer water survey programs will provide assistance to customers to make physical and behavioral changes to reduce water use. These programs will also provide an important public outreach and public relations tool to promote voluntary conservation in the community.

POLICY

REFERENCE: City Municipal Code (Adoption of 2005 Urban Water Management Plan).

FISCAL

IMPACT: Program cost of \$121,000 to be allocated from water fund reserves.

OPTIONS:

- a. Adopt Resolution No. 10-XXX authorizing expenditures for the 2010 Water Conservation Program
- b. Amend, modify, or reject the above option.

Prepared by: Christopher Alakel, Water Manager

Attachments: Resolution
February 5, 2010 Conservation Program Memo

RESOLUTION NO. 10-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES AUTHORIZING
EXPENDITURES FOR THE 2010 WATER CONSERVATION PROGRAM

WHEREAS, City-wide summer water demands may exceed available water supply by 20 percent

WHEREAS, SB 7 (No. 7) recently signed into law requires cities to reduce annual per capita water demand by 10 percent by 2015 and 20 percent by the year 2020 (20 x 2020 requirement). Achieving and maintaining this goal will require significant reductions in use in all sectors. If the City does not achieve this target, it will not be eligible for state water and wastewater grants and low-interest loans.

WHEREAS, to remain eligible for state water management grants and loans, AB 1420 requires cities to be in substantial compliance with the conservation program implementation requirements outlined in the CUWCC Memorandum of Understanding.

WHEREAS, Implementation of the customer audit and financial incentive programs described below will enable the City to address all of the Demand Management Measures outlined in the CUWCC Memorandum of Understanding.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. The City Council of the City of Paso Robles does hereby authorize conservation program expenditures in the amount of \$121,000 in 2010.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 16th day of February 2010 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Duane Picanco, Mayor

ATTEST:

Lonnie Dolan, Deputy City Clerk



MEMORANDUM

TO: Doug Monn

FROM: Christopher Alakel

SUBJECT: Proposed 2010 Water Conservation Programs

DATE: February 5, 2010

This memorandum describes several proposed water conservation programs for 2010 and beyond. Included is a program justification, goals and objectives, description of programs, program costs, and program benefits. The City has been spending money on water conservation education and outreach programs for several years. The program described here represents an initial level of spending for implementation of a comprehensive water conservation program to meet existing and long-term water resources goals and to comply with state water conservation mandates.

Conservation Program Justification – Driving Forces

There are several driving forces that justify implementing additional water conservation programs beyond the current public outreach and mandatory Level 2 water use restrictions. These include:

1. Mandatory Level 2 conservation and outreach programs achieved a 20 percent reduction in peak demand in 2009. However, the City will not be able to maintain this level of conservation in the future without additional programs to assist water users in making investments in water conservation technology, changes in landscaping, and increased awareness. This is anticipated for several reasons:
 - Average or above average rainfall is forecast for this winter, and drought-related watering restrictions over most of the state will likely be lifted. Many customers will be skeptical that the City's water shortage condition has not improved enough to lift Level 2 restrictions. This effect will be noticeable, especially if neighboring communities lift restrictions.
 - Towards the end of the 2009 peak season, more residents were watering multiple times per day during assigned days, or water late in the evening to avoid detection on off-days. This trend is expected to continue for summer 2010.
 - Some residents who cut water use significantly this summer have already expressed a perceived unfairness with the conservation program.
2. SB 7 (No. 7), recently signed into law requires cities to reduce annual per capita water demand by 10 percent by 2015 and 20 percent by the year 2020 (20 x 2020 requirement). Achieving and maintaining this goal year after year will require significant reductions in use in all sectors. To meet this target, the City must reduce per capita use from the pre-2008 ten-

year average of approximately 240 gpcd to about 190 gpcd. One consequence of non-compliance is that the City will not be eligible for state water and wastewater grants and low-interest loans.

3. There will be continued pressure on the City's groundwater resources related to projected future water level declines in the Estrella area of the groundwater basin. Water production at existing City wells is expected to continue to decline in the future. Therefore, even with additional Nacimiento water, reducing summer peak demands through conservation efforts will be an important part of maintaining adequate summer production capacity.
4. AB 1420 recently amended the Urban Water Management Planning Act to require that the eligibility for state water management grants and loans be conditioned on the implementation of the fourteen (14) water demand management measures (DMMs) included in the California Urban Water Conservation Council's Memorandum of Understanding. The City is considering becoming a member of the Council and signing the Memorandum of Understanding. While the City is currently implementing some of the DMMs, several key required DMMs have not been addressed, including customer survey (audit) programs and financial incentive programs for plumbing fixture and landscape retrofits. The City will need to implement these key water conservation programs to continue to qualify for state grants and loans. In addition implementation of these programs will enable the City to address all of the key DMMs included in the Memorandum of Understanding.
5. If new water rates are adopted, monthly water bills in Paso Robles will rise significantly over the next five years. Implementing City programs that provide water conservation technical and financial assistance to customers help mitigate the impact rate increases.

Conservation Program Objectives

The short-term and long-term objectives of the conservation program are:

- Maintain the 20 percent reduction in summer water use in 2010 due to a Level 2 supply shortage.
- Meet the state's 20 x 2020 conservation targets. Achieve a 10 percent reduction in overall gpcd water use by 2015 (to about 214 gpcd) and a 20 percent reduction by 2020 (to about 190 gpcd).
- Provide assistance to customers to lower monthly water use and water bills.

Description of Conservation Programs

Customer Water Survey Program for Homes and Businesses (Water Audits)

This new program would provide a free customer service to residential and commercial accounts seeking to reduce water use. Studies of customer account usage following indoor and outdoor audits indicate average water savings of 8,500 gal./year for single family accounts. This represents a water savings of roughly 5 percent per year for a typical single family account. The actual saving may be significantly higher as Paso Robles due to the relatively high summer irrigation demands.

Staffing Level – In the first year of the program, a part-time temporary staff person at the Water Conservation Assistant level would be assigned to perform the surveys. Surveys are projected to take 1-1.5 hours each plus follow-up. Approximately 9-10 audits per week could be performed, including travel time and record keeping requirements for the program.

Estimated Annual Program Cost -

Staffing - \$18,000 (16 hours/week x \$21/hr)

Materials - \$2,400 (Showerheads, aerators, toilet flappers, shower coaches, miscellaneous supplies)

Marketing - \$1,600 (direct mailing costs)

Total Estimated Cost (Year 1): \$22,000

Customer Financial Incentive (Rebate) Program – Toilet and Landscape Retrofits

This new program is proposed to be funded at an introductory level in 2010. The program would offer up to a \$125 rebate to customers for installation of 1.3 gallon per flush (HET) or dual flush toilets. In addition, a “Cash for Grass” incentive of \$0.50/s.f. of turf removal and installation of low-water-use landscaping would be offered, to a maximum of \$500 per customer. It is proposed that in calendar year 1 of the program, approximately \$18,000 be budgeted for these two incentive programs. This amount would provide for approximately 50 toilet rebates and 30 cash for grass rebates. Funds could be shifted among the two programs depending on demand. Since the City implemented Level 2 mandatory water conservation programs, staff have received numerous inquiries regarding the availability of financial incentives for toilets and landscape retrofits. Program administration would be handled by existing staff with assistance from seasonal staff.

Estimated Annual Cost - \$18,000

Enforcement Staffing for Level 2 Mandatory Watering Restrictions

Two part-time staff @ 20 hours per week for the May 1 to Oct. 15 period will be required. It is assumed that existing Public Works Department vehicles will be used for part-time staff.

Estimated staffing cost: (20 hrs/week x 25 weeks x \$21/hr) - \$21,000

Public Outreach Activities

Continued outreach is planned using several types of media, including:

- Print ads in local newspapers and magazines
- Print and distribute 4 conservation door hangers
- Radio spots in conjunction with Atascadero MWC.
- Bill stuffers: 3-4 full page color planned per year to advertise programs and promote conservation.
- Direct Mail piece informing customers of reinstatement of mandatory restrictions May 1, 2010.
- Signage – banner signage for the coming year
- Purchases of additional brochures and outreach material as needed.

- Continue school education program classroom presentations by water education consultant
- Maintain and improve water conservation website.
- Annual dues to California Urban Water Conservation Council
- Hold 3-4 workshops to promote turf conversion to low-water-use landscaping

Estimated Annual Cost - \$60,000

Calendar Year 2010 Conservation Program Costs and Benefits

The conservation program would be funded out of the Water Fund's existing reserves. The total estimated level of commitment in 2010 is \$121,000. The total estimated annual water savings in 2010 is estimated to exceed 1,200 acre-feet. The cost per acre-foot saved is \$101.

Program Summary

Maintaining a 20 percent reduction in summer demand for 2010 and beyond is critical to the City's ability to meet demand and maintain adequate fire protection. It is anticipated that a fall-off of conservation efforts by customers will occur in 2010 and beyond unless additional conservation programs are implemented. In addition, increasing state water conservation mandates require the implementation of additional programs to maintain eligibility for state grants and loans. The proposed 2010 conservation programs are designed to meet the City's short and long-term water resources objectives and comply with state mandates. The new financial incentive and customer water survey programs will provide assistance to customers to make physical and behavioral changes to reduce water use. These programs will also provide an important public outreach and public relations tool to promote voluntary conservation in the community.