



## CITY OF MARTINEZ

## CITY COUNCIL AGENDA June 1, 2011

**TO:** Mayor and City Council  
**FROM:** Tim Tucker, City Engineer  
**SUBJECT:** Updated Urban Water Management Plan – Public Hearing  
**DATE:** May 24, 2011

### **RECOMMENDATION:**

Conduct a public hearing and consider the attached resolution adopting the updated City of Martinez 2010 Urban Water Management Plan and direct staff to prepare a final plan in accordance with California Water Code, Urban Water Management Planning Act and the California Water Conservation Bill of 2009.

### **BACKGROUND:**

After experiencing severe and extended droughts in the mid 1970s the State of California in 1983 adopted AB 797 (and subsequent amendments), commonly known as the Urban Water Management Planning Act. The act requires every urban water supplier with more than 3,000 customers, which includes the City of Martinez Water System, to adopt and periodically update an Urban Water Management Plan (Plan). The City's plan was last updated in 2005.

The intent of the law is to require urban water suppliers to evaluate benefit and costs for various water conservation methods as an alternative to expanding their water supply. It also requires suppliers to develop plans of action should water shortages occur. Requirements of the plan include the following:

1. Describe the service area including current and projected population, climate, and other demographic factors affecting the suppliers water management planning.
2. Identify and quantify sources of water.
3. Describe the reliability of the water supply and vulnerability to seasonal or climatic shortages.
4. Describe the opportunities for exchange or transfer of water on a short-term or long-term basis.
5. Quantify past and current water use for the various customer type such as single-family residential, commercial, and industrial, etc.
6. Describe the City's water demand management measures (Best Management Practices) along with a schedule of implementation.

An important part of the Plan is to provide an urban water shortage contingency analysis which includes stages of action.

## **RATIONING STAGES AND REDUCTION GOALS**

The City has developed a four-stage rationing plan which is used during a water supply shortage. This plan involves both voluntary and mandatory rationing up to a 50 percent reduction in water use. The rationing stage implemented depends on the restriction imposed by CCWD on the City. A water crisis within the water service area could also cause the shortage conditions and implementation of any rationing stage as appropriate. The following table outlines each of these four reduction stages.

### **WATER RATIONING STAGES AND REDUCTION GOALS**

<b>Shortage Condition</b>	<b>Stage</b>	<b>Description</b>	<b>Customer Reduction Goal</b>	<b>Type of Rationing Program</b>
Up to 15%	I	Voluntary Conservation	15%	Voluntary
15-30%	II	Water Alert	30%	Mandatory
30-40%	III	Water Emergency	40%	Mandatory
40-50%	IV	Water Crisis	50%	Mandatory

A Stage I reduction would be similar to what occurred in 1987 to 1990 and most recently in 2009. Through public education customers were made aware of the need to reduce water consumption. Martinez Water System customers responded to the need to conserve water by decreasing consumption by 25%. A Stage II program was adopted in 1977 and again in the first part of 1991. The Council adopted Resolution No. 47-91 which on May 1, 1991 established prohibition of non-essential use of water. Fortunately, significant late season rains spelled the end of five consecutive low rainfall years. CCWD was able to increase the amount of water available to the Martinez Water System and mandatory rationing was reduced to a voluntary rationing program. The City has not experienced Stage III or IV rationing requirements.

## **WATER ALLOCATION METHODS**

The City has established allocation methods for each customer sector. Single family and multi-family customers are allocated water through percentage reductions, gallons per dwelling unit, and gallons per capita depending on the particular rationing stage implemented. Commercial, industrial, irrigation and public customer sectors are allocated water on a percentage reduction from their previous years. A certain amount of water is allocated for fire prevention purposes.

The City of Martinez determines the water allocation to each customer and calculates their allotment according to the information shown in the following table. Each bill for water service states the water ration for the service applicable to the following billing period. If a customer's use is under the allotment in any given billing period, the water may be "banked" for future use during that year. A written appeal may be filled to request an exception to the granted water allotment.

## WATER ALLOCATION FOR RATIONING STAGES

Water Use Sector	Stage II	Stage III	Stage IV
Single Family	200 gal/DU/day	90 gpcd (single occupant) then 50 gpcd additional	50 gpcd
Multi-Family	85%	70 gpcd (single occupant) then 50 gpcd additional	50 gpcd
Commercial	75%	70%	60%
Industrial	85%	75%	70%
Institutional and Government	75%	70%	60%
Landscape	25%	25%	5%

The water reduction goals for the 2009 rationing program varied slightly higher from the allotments listed.

## RATE STRUCTURE UNDER RATIONING

Proposed measures to overcome revenue impacts of rationing include development of reserves and a drought surcharge on water use. The City of Martinez bases its water system budget on previous year use and anticipated drought conditions. Revenue reduction caused by a reduction in water usage could be made up from reserves, or a drought surcharge could be imposed on water users of the system as was done during the 1991 drought. Although no significant expenditures are anticipated to implement water conservation measures during a drought, large expenditures may be necessary under a catastrophic supply interruption. Funding for these would be made up from reserves or obtained through State and Federal aid packages (i.e. FEMA).

During the 1991 rationing program, an extra charge was established for water withdrawn from the Martinez water system by any service connection in excess of its allotted amount. This penalty is outlined in Resolution No. 47-91. The following table shows the penalties imposed in 1991. This rate structure will be reviewed and modified prior to implementation of a future rationing program.

### 1991 EXCESS USE CHARGES PER BILLING PERIOD<sup>1</sup> (STAGE II RATIONING)

Customer Sector	Excess Use Above Allotment	Excess Charge
Single Family	First 500 cubic feet	2 X Unit Price
	Next 500 cubic feet	3 X Unit Price
	Excess beyond 1,000 cubic feet	4 X Unit Price
All Other Users	First 10% excess	2 X Unit Price
	Next 10% excess	3 X Unit Price
	Additional excess	4 X Unit Price

<sup>1</sup>Billing period is bi-monthly.

During the 1991 rationing program, Resolution No. 47-91 also called for installation of flow restrictors in services where the quantity of water withdrawn exceeded the water ration allotment by 20 percent and 20 hundred cubic feet per service during two (2) consecutive billing periods. Flow restrictors remain in place a minimum of seven (7) days the first time installed and fourteen (14) days each consecutive time thereafter. The customer is charged for each time restrictors are installed.

**New Requirements:**

The City will be required to reduce its future daily per capita usage to meet the requirements of the 20 x 2020 Water Conservation Plan instituted by the State during the past drought. The City of Martinez will participate in a regional 20 x 2020 Water Conservation Plan through CCWD. With participation in the regional 20 x 2020 Plan, it may be required for the City to meet reduction requirements of the 20 x 2020 Conservation Plan individually. In this case, the City would be required to reduce its 10-year baseline daily per capita usage by 20 percent by 2020, and by an interim target of 10 percent by 2015. The following table indicates reduction targets for the City to meet the 20 x 2020 Water Conservation Plan individually.

**MAXIMUM DAILY PER CAPITA WATER USE REDUCTIONS  
REQUIRED BY 20 X 2020 PLAN**

Year	GPCD Reduction Required for 20x2020 Plan	Annual Daily Per Capita Water Use (GPCD)
10-Year Base	--	160
2015	10%	144
2020	20%	128

For the City to meet the requirements of the 20 x 2020 Water Conservation Plan individually, it will be required to reduce its usage to 144 GPCD by 2015 and 128 GPCD by 2020. Because the City will participate in a regional effort through CCWD, the City may be allowed to have individual reductions less than this if CCWD’s region as a whole can meet the requirements of the 20 x 2020 Water Conservation Plan. CCWD is currently in the process of determining specific reduction requirements for the individual agencies involved in the regional 20 x 2020 Conservation Plan.

If it is determined that the City must meet the requirements of 20 x 2020 individually, the City’s reduction must be greater than 5 percent of its 5-year base range daily per capita water use by 2020.

**Coordination and Outreach:**

The 2010 Urban Water Management Plan was prepared in coordination with various City departments. Coordination between the Community Development Department and Finance Department was essential in obtaining the information for population projections and current and historic water use required to prepare the plan.

Coordination between the City of Martinez and other agencies was key in the development of this plan. Agencies which participated and provided valuable information include:

- ◆ Contra Costa Water District (CCWD) – water supply and conservation information
- ◆ Central Contra Costa Sanitary District (CCCSA) – recycled water availability and use
- ◆ Mountain View Sanitary District (MVSD) – recycled water availability and use
- ◆ Contra Costa County – treated water customer service in County jurisdiction areas
- ◆ City of Pleasant Hill – treated water customer service in City jurisdiction areas

Implementation of Demand Management Measures (DMMs) within the City of Martinez is coordinated with Contra Costa Water District's (CCWD) conservation program. In October 1993, the CCWD board voted to implement DMMs throughout their entire service area, including retail customers within their wholesale water area. CCWD's Future Water Supply Study has identified water conservation as a component in its plan to meet future water demands within its service area.

Prior to the adoption of the plan the City must make the plan available for public inspection and conduct a public hearing. Notice and the time and place of the hearing are established by the Government Code. A copy of the draft UWMP update 2010 has been made available for public review in the City Clerk's Office.

**FISCAL IMPACT:**

None.

**ACTION:**

Adopt Resolution updating City of Martinez 2010 Urban Water Management Plan and direct staff to prepare a final plan in accordance with California Water Code, Urban Water Management Planning Act and the California Water Conservation Bill of 2009.

Attachment: Resolution

A handwritten signature in black ink, appearing to read "Philip V. Vire". The signature is written in a cursive style with a large initial "P".

**APPROVED BY:** City Manager

RESOLUTION NO. -11

**ADOPTING UPDATED CITY OF MARTINEZ 2010 URBAN WATER MANAGEMENT PLAN AND DIRECT STAFF TO PREPARE A FINAL PLAN IN ACCORDANCE WITH CALIFORNIA WATER CODE, URBAN WATER MANAGEMENT PLANNING ACT AND THE CALIFORNIA WATER CONSERVATION BILL OF 2009**

**WHEREAS**, the California Legislature enacted Assembly Bill 797 (Water Code Section 10610 et seq., known as the Urban Water Management Planning Act, ("Act")) and amended subsequently, which mandates that every supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan, primary objective of which is to plan for the conservation and efficient use of water; and

**WHEREAS**, the plan shall be periodically reviewed at least once every five years, and the City shall make any amendments or changes to its plan which are indicated by the review; and

**WHEREAS**, the City commenced a review of its existing Urban Water Management Plan in 2010, and based upon such review has prepared a revised and updated District Urban Water Management Plan for adoption in 2011; and

**WHEREAS**, a draft of the 2010 Urban Water Management Plan has been made available for public inspection and all comments received from the public and from public agencies have been reviewed and considered, and a duly noticed public hearing was conducted by the City Council on June 1, 2011 prior to adoption of the proposed revisions to the City's Urban Water Management Plan, all in accordance with the Act; and

**WHEREAS**, the City of Martinez did prepare, and shall file, said Plan with the California Department of Water Resources by December 31, 2011.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Martinez that the Urban Water Management Plan, as presented, is adopted.

\* \* \* \* \*

**I HEREBY CERTIFY** that the foregoing is a true and correct copy of a resolution duly adopted by the City Council of the City of Martinez at a regular meeting of said Council held on 1<sup>ST</sup> day of June, 2011, by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK  
CITY OF MARTINEZ