



**CITY OF MARTINEZ**

**CITY COUNCIL AGENDA  
January 20, 2010**

**TO:** Mayor and City Council  
**FROM:** Tim Tucker, City Engineer  
Alan Pellegrini, Water Superintendent  
**SUBJECT:** Water Conservation update  
**DATE:** January 5, 2010

**RECOMMENDATION:**

Adopt resolutions:

- a. Allocating \$45,000 for continuation of the Drought Management Program from the unrestricted Water Fund surplus.
- b. Amending Section 8 of Resolution No. 044-09 exempting penalties on water use less than or equal to 300 gallons per day per single family or multi-family residential account.
- c. Allocating \$26,750 for the installation of well at Hidden Valley Park for irrigation purposes from the Park In-Lieu account.

**BACKGROUND:**

***Water Supply Update:***

Similar to energy conservation and waste reduction, water conservation is a long term necessity for the State of California. In 2008 the Governor directed State agencies to develop a plan to reduce statewide per capita urban water use by 20 percent by the year 2020 (20x2020 Plan.) Benefits of an aggressive water conservation effort include:

- reduces stress on the environment of the Sacramento-San Joaquin delta
- reduces the demand for wastewater treatment, including treatment and O&M costs
- reduces water-related energy demands and associated greenhouse gas emissions
- improve the ability to meet environmental needs
- Improves the quality of receiving waters related to reduced discharges (NPDES goal)

California Department of Water Resources published a "California Drought" update in December 2009. Water storage supplies continue to be significantly below historic averages (see attached chart.) The three primary reservoirs in Northern California, Trinity Lake, Shasta Reservoir and Lake Oroville are 40 to 50 percent below historic levels. Many water agencies throughout California, including Martinez, have implemented voluntary or mandatory conservation programs (see attachment). The California update concludes:

- It is important to plan for a potential dry 2010. Impacts being experienced in the present-year drought are relatively more severe than those experienced during the prior dry conditions such as the first three years of the 1987-92 five-year drought.
- Drought preparedness must include managing the problems confronting the Bay-Delta. Sustainability for water users and for the ecosystem is a necessity.
- Outreach and education are key elements of drought response.
- Placement of an \$11.14 billion water bond measure before the voters is a critical first step towards improving condition in the Delta.

On May 20, 2009 the City Council adopted Resolution 44-09 establishing water conservation measures, water reduction goals and a penalty system for increased water use. The City had set a goal of 15% reduction per month. Overall Martinez residents have done a great job at reducing water use. Water reduction over the past 7 months is as follows:

<u>Month</u>	<u>Reduction</u>
May	15.9%
June	25.8%
July	23.3%
August	20.8%
September	15.0%
October	24.1%
November	15.5%

Water reduction goals are more difficult to meet in cool and/or wet months. This requires reduction of indoors water use. Indoor water conservation requires changes in lifestyle along with modification of water fixtures. Rebates and water conservation kits are still available to help our customers continue to conserve water.

Staff proposes to continue the funding for a temporary full time Water Conservation Specialist position. Staff is requesting the Council adopt a resolution to allocate \$30,000 to fund this position over the next twelve months. This funding is proposed to be allocated from the unrestricted water fund surplus.

***City Conservation effort:***

The Public Works Department continues to look for opportunities to reduce water use from CCWD or Martinez water supplies. During summer months the Public Works department acquired a water truck and reclaimed water from Mt. View Sanitary District to be used to water trees in City medians. The department has significantly reduced irrigation water use by more efficiently regulating water times and duration. Lastly, the department has investigated the use of well water at various parks. They have determined they can cost effectively re-establish well water service at Hidden Valley Park. They need to have a pump test performed at the cost of \$5,650. If those results are positive and the well can be restored, the cost estimate to finish the reinstallation of all equipment including electrical is \$19,100. Staff proposes utilizing Park In-Lieu funds to cover the cost of the work.

***Regulation update:***

Staff proposes making a minor change in our conservation resolution. It was never the intent to penalize low water users. Due to difficulties with billing software programming a minimum use threshold was not proposed. Staff has overcome this difficulty by processing exemption requests from low water users. Staff proposes exempting penalties for low water use single and per unit of multi-family households. Staff proposes to amend Section 8 of Resolution 44-09 to include:

***(c) Excepting from "(b)" above, no penalty shall be applied for water use less than or equal to, 300 gallons per day per single family or 300 gallons per day per unit of multi-family residential account.***

This amendment will significantly reduce the number of exemption requests. We are currently manually adjusting these bills. Included in the attached resolution is a request for \$15,000 in funding to modify our software so these exemptions can be done automatically.

Further amendments to the City's Water Conservation regulations will be needed to comply with the 20x2020 plan when it is finalized and ultimately adopted.

**FISCAL IMPACT:**

***Drought Management Program:***

Water Conservation Specialist (Temp/FT)	\$30,000
Software Upgrades	\$15,000

Staff proposes to fund these programs through the unrestricted Water Fund surplus which is currently approximately \$4 million.

***Hidden Valley Park well:***

Testing	\$ 5,650
Equipment/electrical	\$19,100
Contingency	<u>\$ 2,000</u>
TOTAL	\$26,750

Funding for the Hidden Valley Park well is proposed to be from the Park In-Lieu fund balance which is currently approximately \$250,600.



RESOLUTION NO. -10

**ALLOCATING \$45,000 FOR CONTINUATION OF THE DROUGHT MANAGEMENT PROGRAM FROM THE UNRESTRICTED WATER FUND SURPLUS**

**WHEREAS**, the City of Martinez provides treated water to portions of Martinez and the surrounding area; and

**WHEREAS**, the City receives untreated raw water from Contra Costa Water District (CCWD); and

**WHEREAS**, California has been in drought conditions for three consecutive years; and

**WHEREAS**, the U.S. Bureau of Reclamation reduced water supplies 60 percent in 2009; and

**WHEREAS**, it is expected water supplies will continue to be reduced; and

**WHEREAS**, the City of Martinez has developed a Drought Management Program that requires the City of Martinez and its customers to reduce water use; and

**WHEREAS**, it is necessary to hire a Water Conservation Specialist to assist our customers to continue to meet water reduction goals; and

**WHEREAS**, it is necessary to up grade the City's billing software to better manage the Drought Management Program; and

**WHEREAS**, the cost of maintaining the Drought Management Program over the next twelve months is estimated to be \$30,000 for a temporary full time Water Conservation Specialist and \$15,000 for upgrading water billing software for a total of \$45,000.

**NOW THEREFORE, IT BE RESOLVED** by the City Council of the City of Martinez, that \$45,000 be transferred from the Unrestricted Water Fund surplus to continue the City's Drought Management Program.

\* \* \* \* \*

**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 the 20th day of January, 2010 by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK  
CITY OF MARTINEZ

RESOLUTION NO. -10

AMENDING SECTION 8 OF RESOLUTION NO. 044-09 EXEMPTING PENALTIES APPLIED FOR WATER USE LESS THAN OR EQUAL TO 300 GALLONS PER DAY PER SINGLE FAMILY OR MULTI-FAMILY RESIDENTIAL ACCOUNT

THE CITY COUNCIL RESOLVES SECTION 8 OF RESOLUTION NO. 044-09 BE AMMENDED TO READ AS FOLLOWS:

Section 8. Penalties for exceeding Martinez Water System Historical Water Usage Average for calendar years 2005, 2006 and 2007 or portion thereof.

(a) Commencing with the first billing period after adoption of this resolution, an extra charge shall be made for water withdrawn from the Martinez Water System by any service connection in excess of its Historic water usage excepting for metered irrigation areas shall be in excess of 85% of its Historic water use. For bills with usage outside the rationing period average daily use will be used to determine the extra charge, or actual metered use if available.

(b) The extra charge for the billing shall be as follows:

All water usage above Historical Water Usage Average, excepting for metered irrigation areas shall be usage above 85% of its Historic use, per billing cycle: 4 times rate.

***(C) Excepting from "(b)" above, no penalty shall be applied for water use less than or equal to; 300 gallons per day per single family or 300 gallons per day per unit of multi-family residential account.***

A service may have a flow restrictor installed if the quantity of water withdrawn exceeds the water reduction goals by 20 percent and/or 20 hcf for the service during two consecutive billing periods.

\* \* \* \* \*

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AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK  
CITY OF MARTINEZ

RESOLUTION NO. -10

**ALLOCATING \$26,750 FOR THE INSTALLATION OF WELL AT HIDDEN VALLEY PARK FOR IRRIGATION PURPOSES FROM THE PARK IN-LIEU ACCOUNT**

**WHEREAS**, the City of Martinez provides treated water to portions of Martinez and the surrounding area; and

**WHEREAS**, the City receives treated and untreated raw water from Contra Costa Water District (CCWD); and

**WHEREAS**, California has been in drought conditions for three consecutive years; and

**WHEREAS**, the U.S. Bureau of Reclamation reduced water supplies 60 percent in 2009; and

**WHEREAS**, it is expected water supplies will continue to be reduced; and

**WHEREAS**, the City of Martinez has developed a Drought Management Program that requires the City of Martinez and its customers to reduce water use; and

**WHEREAS**, the City can reduce the use of treated water at Hidden Valley Park by installing a water well for irrigation purposes; and

**WHEREAS**, the cost of testing and installing said water well is estimated to be \$26,750.

**NOW THEREFORE, IT BE RESOLVED** by the City Council of the City of Martinez, that \$26,750 be transferred from the Park In-Lieu Fund surplus to install a well at Hidden Valley Park.

\* \* \* \* \*

**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 the 20th day of January, 2010 by the following vote:

AYES:

NOES:

ABSENT:

RICHARD G. HERNANDEZ, CITY CLERK  
CITY OF MARTINEZ

Figure 8. Reservoir Storage at Selected Facilities

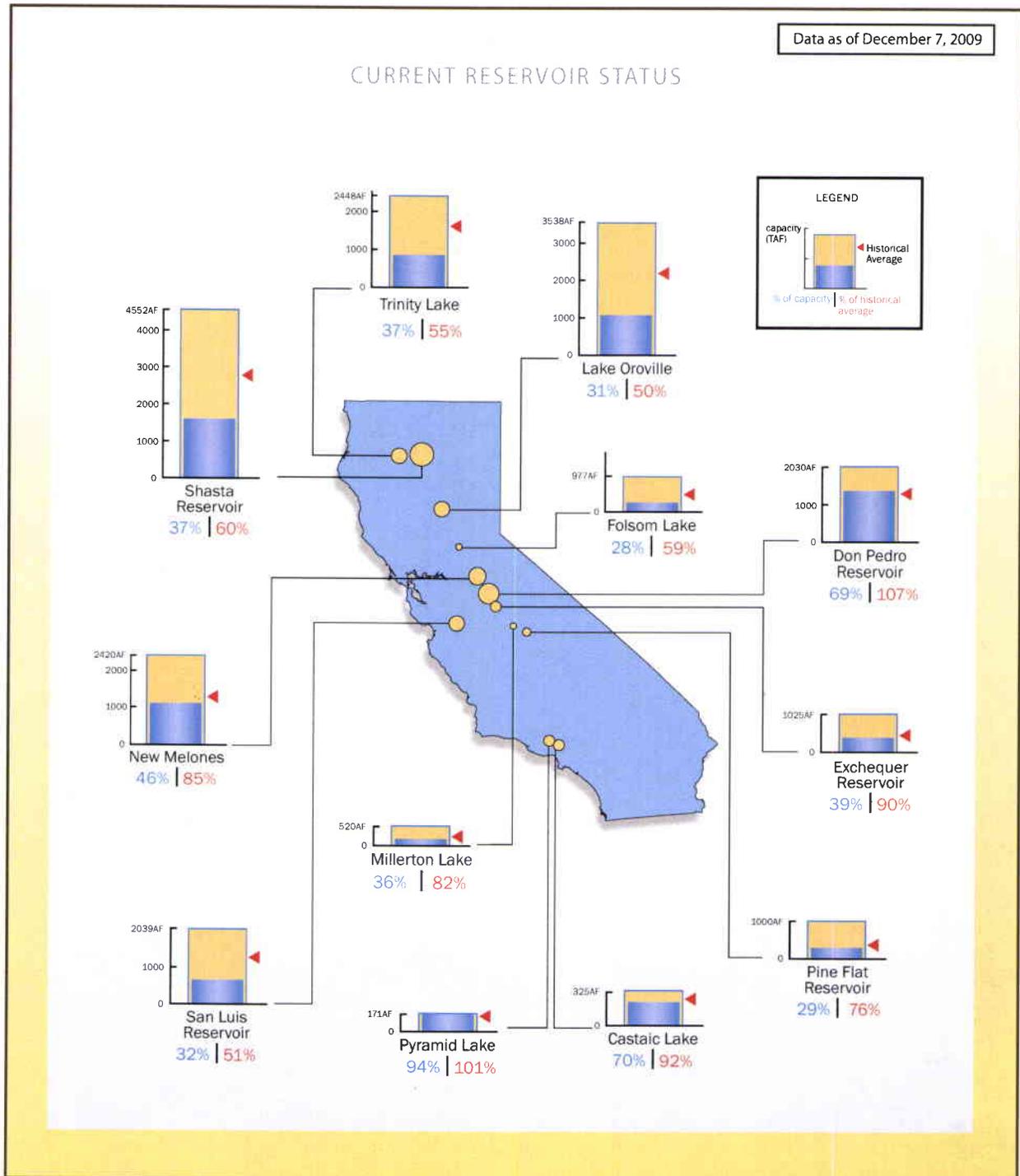


Figure 19. Locations of Local Agencies with Conservation Program Information.



Data courtesy of: Association of California Water Agencies

## CHAPTER 4. CONCLUSIONS

The 2008 and 2009 drought executive order and emergency proclamations directed the Department, together with other state agencies, to take specified actions to respond to drought conditions. The February 2009 emergency proclamation specifically required preparation of a March 2009 status report to the Governor's Office, (available at: [http://www.water.ca.gov/news/new\\_sreleases/2009/040209droughttrpt-gov.pdf](http://www.water.ca.gov/news/new_sreleases/2009/040209droughttrpt-gov.pdf)), which, among other things, was intended to identify any need for additional orders to mitigate emergency conditions. The March 2009 status report did not identify a need for additional emergency measures, but committed the Department to continued review of the status of drought conditions. The Department's continued review of drought conditions contained in the June 2009 mid-year status report and in this December 2009 report likewise do not identify a need for additional emergency measures at the present time.

A major finding of the status reviews is the importance of preparing for the possibility of a potentially dry 2010. Impacts being experienced in the present three-year drought are relatively more severe than those experienced during prior dry conditions – such as the first three years of the 1987-92 drought. The increased severity is directly related to increased regulatory restrictions to protect listed fish species that limit the ability to convey water across the Delta. The increased severity further reflects the addition of nine million people to California since 1990, as well as the expanded acreage of permanent plantings on the west side of the San Joaquin Valley, an area of now-chronic agricultural water shortages. As part of preparing for a dry 2010, the Department will continue to carry out actions described in the March 2009 status report to the Governor's Office. Outreach and education are key elements of drought response; the Department will continue to seek opportunities for incorporating these elements into planning for 2010.

In the longer term, drought preparedness for California must include managing the problems confronting the Bay-Delta. Sustainability – for water users and for the ecosystem – is a necessity. One of California's major strengths in responding to droughts is its extensive system of water infrastructure that affords great flexibility in moving water to areas of critical need; this is a capability unmatched in any other state. The Delta lies at the hub of this water distribution system, and implementing a solution there is central to maintaining operational flexibility during droughts and other emergencies.

The historic package of comprehensive water legislation enacted in November 2009 – establishing a Delta governance framework, calling for development of a Delta plan, creating a requirement for local agency monitoring of groundwater, establishing a process and goals for statewide

water conservation, providing for improved accounting of water diversion and use, and authorizing placement of an \$11.14 billion water bond measure before the voters – is a critical first step toward improving conditions in the Delta. Time will be needed, however, to put these new programs in place and to gain the benefits of their implementation. Until Delta water management conditions can be improved, California’s vulnerability to drought will remain elevated.