MEMO

September 10, 2008

TO: City Council Members

FROM: Rich Cunningham, Public Works Manager

RE: Water Conservation Status

This memo is provided as background information for the City Council agenda item on the presentation from East Bay Municipal Utilities District Board Member Andy Katz on the drought and need for water use reduction.

Background:

EBMUD has issued water use reduction guidelines in response to the current drought that substantially impact the landscape management of public spaces in Albany.

"Irrigation Use" accounts, which are how the landscape water meters are classified, are subject to a 30% reduction in usage from the baseline calculated against the 2004-07 billings.

Albany Response:

We have responded to the reduction order in two ways: conservation and the development of alternative water supplies.

Conservation:

1) All the irrigation controllers in the three principal parks (Terrace, Memorial, and Ocean View) have been changed to the "ET" (EvapoTranspiration) design. This technology allows climate data to be fed into the controller to adjust the water application rate.

The Ohlone Greenway controllers are due for change to the "ET" design as part of the post BART seismic work.

2) We are installing direct burial moisture sensors into Memorial's and Ocean View's athletic fields. These sensors will interface with the controller to provide in-ground measurements of actual moisture content.

Alternative Water Supplies:

1) We contracted for a flow and re-charge test of the Albany city well, which is located in the shed building on the east side of the Veterans Memorial Building. The test results provided a basis for whether or not to invest in engineering the well to be a source of irrigation water for Memorial Park and possibly the Ohlone Greenway, which is located very nearby.

The test results indicated that while the well holds 4500 gallons of water on a constant basis, it takes 3-4 days for the groundwater to fill the well up again. This makes investment in the well questionable because of its slow recharge rate.

However, the well represents an emergency supply of water that would be usable in event of an earthquake and severing of EBMUD service.

2) EBMUD is engaged in a project to deliver reclaimed water from the wastewater treatment plant in Oakland to four cities: Oakland, Emeryville, Berkeley, and Albany. The project entails the construction of a pressurized line (currently in design/bid) in the CALTRANS right-of-way along the Eastshore Freeway.

The project is behind schedule because of problems with CALTRANS and it appears it will be two years from now before Albany gets reclaimed water, due to be piped up Buchanan Street. Upon its arrival, it will be immediately put to use in Ocean View Park (which we plumbed with purple pipe in anticipation of the reclaimed), the Buchanan Street medians, and the USDA facility, which also installed purple pipe.

The current EBMUD plan calls for the delivery pipe to terminate at Buchanan and Jackson. However, we have asked their project managers to modify the plans to extend the pipe to it 6/10's of a mile further east – to Marin and Masonic - so we can irrigate the Ohlone Greenway with reclaimed water.

Extending the pipe would be an enormous step forward in conserving water in Albany because the Greenway is a major water user (nine acres) and would greatly benefit from an enlarged project.