

**WEST BASIN MUNICIPAL WATER DISTRICT**

**AUGUST 6, 2003 - Water Resources**  
McDonald, Little

**AUGUST 25, 2003 - Board Meeting**

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Approved by: Darryl G. Miller

ACTION CALENDAR

SALT MANAGEMENT GUIDE

SUMMARY:

Recycled water has been used in California for more than 40 years; however, recycled water use has recently multiplied exponentially as potable supplies are proving unreliable. Although approved for many different uses, recycled water is typically used for irrigation of landscapes, parks, highway medians, golf courses, etc.

It is apparent to water agencies that recycled water is an obvious choice for landscape irrigation when available for use, not to mention that it is a regulatory requirement in California. However, the regulation is not well enforced, giving potential recycled water customers the feeling that they have a choice whether to use recycled water or potable water for irrigation.

Also, given the fact that many landscape professionals do not fully understand the unique quality of recycled water, the local water industry has to deal with a sub-population choosing the comfort of potable water over the conserving benefits of recycled water. Water agencies supplying recycled water need to be able to respond to concerns raised by potential customers, especially those surrounding the excess salt levels recycled water contains.

Locally, the City of Lakewood recently made the choice to use potable water instead of recycled water for the very reason of excess salt levels. Using grant money received, the City planted a 17-acre greenbelt with native vegetation, and planned on irrigation with recycled water. After laboratory analyses were conducted on the recycled water, it was recommended that the City not use recycled water because it was of marginal quality for landscape irrigation due to the elevated sodium and chloride levels.

**Salt Management Guide**

An upcoming research project titled "Salt Management Guide" will address just this topic - salt management issues specific to the use of recycled water in irrigation of landscapes. It will also provide appropriate management techniques through the production of a Salt Management Guide, a matrix-based system that the landscape manager can use to determine when to implement salt management activities.

A literature search will be conducted first that identifies the varying factors that control the need for salt management in irrigation with recycled water, and also identifies current salt issues. A detailed summary of the literature search will be provided.

The Salt Management Guide will include a brief introduction section to the uses of recycled water, safety, quality, etc., but the core of the guide will be a matrix. This matrix will allow landscape managers to match up their site specific qualities to the matrix to determine when or if they need to implement salt management practices. Salt management practices will be appropriately recommended to include soil maintenance, irrigation methods, irrigation schedules, etc. The Salt Management Guide will be produced on CD for easy distribution.

### **Benefits to the District**

For any water agency supplying recycled water, customer knowledge, confidence, and satisfaction are very important toward establishing, as well as growing, a successful water recycling program. Without this, there can be difficulty in garnering customer confidence and can have a ripple effect with future landscape irrigation customers. Results from this research project will help West Basin to be able to respond to concerns raised by potential customers, especially concerns about the salt levels in recycled water.

### **Collaboration**

This Project was a collaborative effort with Central Basin Municipal Water District, City of Cerritos, Inland Empire Utilities Agency, Irvine Ranch Water District, City of Lakewood, County Sanitation District of Los Angeles County, Los Angeles Department of Water and Power, Phoenix Water Services Department, San Diego County Water Authority, and the City of San Jose. It was submitted as a tailored collaboration by Central Basin to the WaterReuse Foundation (WRF), requesting \$50,000 in funds. A final decision from the WRF is expected at the end of July.

The other \$50,000 for this Project may come from the Department of Water Resources (\$20,000) and the collaborating utilities (\$30,000). The City of Cerritos and the Los Angeles Department of Water and Power have each pledged \$3,000 toward this Project. If additional funding on this Project is limited, West Basin may need to finance up to \$24,000 to support the Salt Management Guide.

### **FISCAL IMPACTS:**

Funds are included in the research and development fiscal year 2003-04 budget.

### **ENVIRONMENTAL COMPLIANCE:**

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on August 6, 2003 and was recommended for approval at the August 25, 2003 Board meeting.

RECOMMENDED MOTIONS:

Authorize the General Manager to contribute up to \$24,000 to the Salt Management Guide, if necessary.

LIST OF EXHIBITS:

None.

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