

REACHING BEYOND THE VISION: Achieving a Drought-Proof Region



CONSERVATION MASTER PLAN Highlights



WEST BASIN
MUNICIPAL WATER DISTRICT

// Once again, West Basin demonstrates its leadership in developing innovative local programs and partnering with businesses and government agencies to safeguard our precious water supply and retain the quality of life we so cherish in Southern California. //

Jacki Bacharach, Executive Director
South Bay Cities Council of Governments

// West Basin is a leader in promoting water supply sustainability in southern California. Their Conservation Master Plan is a leap forward in the pursuit of regional targets for water use efficiency, and an excellent complement to their aggressive water recycling program. //

Tim Brick, Chairman
Metropolitan Water District
of Southern California

// The California Urban Water Conservation Council is pleased to indicate its overall support for the excellent conservation master planning efforts that have been initiated by West Basin MWD. This effort is a thorough, well-thought out process that is rarely seen in conservation planning. //

Mary Ann Dickinson, Executive Director
California Urban Water Conservation Council

// The unique partnership between the Surfrider Foundation and West Basin Municipal Water District speaks to the ability of the District in reaching out to the environmental community. I see this partnership as a model on how we can work together on an integrated approach to improving water quality at our local beaches while simultaneously meeting ever increasing demands for fresh water. //

Joe Geever, Environmental Coordinator
Southern California Regional Manager
Surfrider Foundation



INTRODUCTION

Fifteen years ago, drought conditions throughout Southern California reminded us that we live in a desert-like environment. At that time, our region relied too much upon distant water sources.

Since that time, the West Basin Municipal Water District has joined with leaders in government, industry, the water community, environmental organizations and concerned citizens to pursue a comprehensive water resource strategy. The goal in past years has been to achieve a safe and reliable water supply for Southern California – a supply that was not dependent predominantly on “imported” water.

This ambitious goal has resulted in numerous successes. Major water conservation, recycling and education programs have been launched with positive results. The region’s water supply portfolio has diversified dramatically, becoming less dependent on imported water.

In recognition of these accomplishments, West Basin has received several prestigious awards for its conservation programs and water sustainability initiatives. However, the District is not resting on these laurels. Going forward, the goal is to move “Beyond the Vision” in pursuing as many initiatives as possible to achieve a drought-proof region for generations to come.

As we have learned, successful water conservation requires more than the application of water saving devices, retrofits and irrigation programs. Integrated partnerships between West Basin and numerous government agencies, political leaders, non-profit organizations, water and energy utilities, education, commercial and community groups have helped Southern California achieve a more reliable water supply. These outstanding partners include:

U.S. Bureau of Reclamation

California Dept. of Water Resources

Metropolitan Water District of S. California

City of El Segundo

City of Inglewood

City of Lomita

City of Malibu

City of Manhattan Beach

City of Torrance

California-American Water Company

California Water Service Company

Golden State Water Company

Los Angeles County Waterworks District #29

Water Replenishment District of S. California

South Bay Cities Council of Governments

South Bay Energy Savings Center

California State University, Dominguez Hills

Los Angeles Unified School District

Surfrider Foundation

Heal the Bay

Mono Lake Committee

PV/South Bay Audubon Society

Ballona Creek Watershed

Santa Monica Baykeeper

Malibu Creek Watershed

Resource Conservation District
of the Santa Monica Mountains

Going forward, progress on water-related supply and sustainability issues will continue to help insure an integrated and diverse system of managing one of our region’s most precious resources — water.



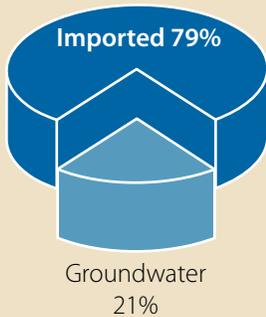
West Basin developed this Conservation Master Plan to guide regional investments and translate conservation goals into tangible initiatives for residents, businesses and governments.



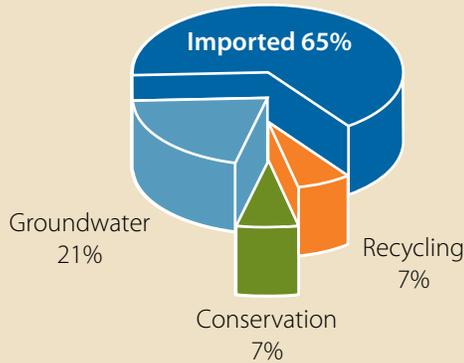
REACHING BEYOND THE VISION: ACHIEVING A DROUGHT-PROOF REGION

Conservation is an integral part of West Basin's goals of reducing imported water use and diversifying the mix of supplies for the region. Two decades ago most of our area's need for water was met by imported sources. By 2015, a significant portion of local water will come from the conservation programs and policies now being implemented.

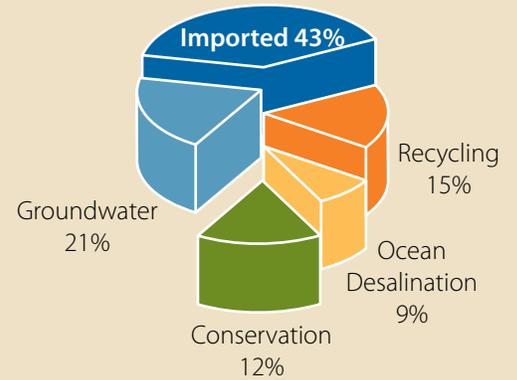
1990
Heavy Dependence on Imported Supply



2006
Today's Water Supply Mix



2015
More Balance and Diversity



To reach these goals, West Basin developed this Conservation Master Plan to guide regional investments and translate conservation goals into tangible initiatives for residents, businesses and governments. This Plan has been created to adapt to changing technologies and environmental conditions, while at the same time offering substantive recommendations within home environments and business communities. Key highlights of the Plan are outlined on the following pages.

The Master Plan is designed to be flexible and adaptable to changing technologies and environmental conditions. Similarly, the Plan is based on programs that deliver water and energy savings, environmental and other benefits that exceed the cost to local residents and businesses.



DEVELOPMENT OF THE CONSERVATION MASTER PLAN



This Master Plan results from a collaborative and methodical process involving numerous stakeholders, water experts and government entities, and incorporates the following goals:

Achieve long-term water savings targets
Implement cost-effective programs that have high stakeholder acceptance
Create a plan that is flexible and expandable

The steps necessary to develop the Master Plan are as follows:

Step 1: Create End-Use Database

Retail water agencies in the area provided water usage history from over 16,000 commercial and industrial accounts. Data included type of water user, total water use and location. Storing this information in a database will help West Basin design targeted, cost-effective conservation programs well into the future.

Step 2: Develop Preliminary Program Concepts

Using the information provided in Step 1, and industry knowledge of conservation devices that are cost-effective and readily available, West Basin developed preliminary concepts for conservation programs.

Step 3: Add Stakeholder Input

Through public workshops, individuals from local agencies, environmental groups, and conservation industry professionals offered insight into the pitfalls and possibilities of various conservation programs as well as ideas for new programs.

Step 4: Complete, Evaluate and Rank Programs

Each program concept was expanded to include specific details regarding market potential, expected water savings, costs per unit and overall budget. West Basin narrowed the program list using evaluation criteria weighted by importance.

Step 5: Recommend Programs and Implementation Plan

The final recommended list of programs is a diverse mix of both new and on-going programs covering commercial, industrial, residential, and landscape opportunities. New programs will be phased-in to allow West Basin to adequately plan for budget and staffing needs. The Recommended Program Mix was approved by the West Basin Board of Directors.

Step 6: Monitoring and Updating the Master Plan

The 5-Year Recommended Program Mix contained within the Master Plan is West Basin's best projection of future water savings required to meet long-term targets. Actual results, however, may vary for many different reasons. West Basin will monitor program performance and periodically update the Master Plan, drawing from the end-use database created in Step 1, and the latest conservation practices and devices.

CONSERVATION MASTER PLAN RECOMMENDED PROGRAM MIX

PROGRAMS	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11
RESIDENTIAL					
HET ^[1] Distributions & Multi-family Installations					
Residential HECW ^[2] Rebates					
HET Rebates					
COMMERCIAL					
Save-A-Buck CII Incentives					
Complete Restroom Retrofit					
Pre-Rinse Spray Valve Installs					
Comprehensive Laundromat Program					
Conductivity Controllers Incentive					
Industrial Process Improvement					
Comprehensive Supermarket Program					
OUTDOOR					
Smart Controller Distributions					
Residential and Professional Landscape Workshops					
Ocean-Friendly Landscape					

Length of programs subject to availability of funding.

^[1] HET = High-Efficiency Toilet

^[2] HECW = High-Efficiency Clothes Washer



West Basin hosts stakeholder workshop during Master Plan development.



There is still a large opportunity for water-efficient retrofits within our businesses, schools, restaurants, and other high-traffic facilities.



COMMERCIAL AND INDUSTRIAL PROGRAMS

The approximately 12,000 commercial customers in our region use 12% of all water in the region. There is still a large opportunity for water-efficient retrofits within our businesses, schools, restaurants, and other high-traffic facilities. These customers can save water and save money by participating in one or more of the following West Basin incentive programs:

Complete Restroom Retrofit Program

Through the aid of a State grant and various incentives, the Complete Restroom Retrofit Program provides qualifying businesses, schools, restaurants and other facilities with free water-efficient fixtures and installations that can save up to 90,000 gallons of water annually. Every customer can receive up to two High-Efficiency Toilets (HET), two automatic sensor sink faucets and one Water-free urinal per restroom, at no cost.

Comprehensive Laundromat Program

Coin-operated laundromats are high water consumers. However, replacing laundromat machines can be a costly endeavor. Now, through partnership incentives from West Basin and several other water and energy utilities, participating laundromats can recover up to \$680 for every washer that is upgraded to a high-efficiency model. These new High-Efficiency Clothes Washers can reduce energy costs by up to 50% and lower water and sewer costs by 30-50% while conserving over 100 gallons per day.

“Save Water Save A Buck” Program

The “Save Water Save A Buck” Program currently offers rebates and incentives on various devices including toilets, waterless urinals and high-efficiency urinals, water brooms, connectionless food steamers and restaurant spray nozzles. Businesses, schools, restaurants and other facilities can save up to several hundred dollars per product. A complete list of all available “Save A Buck” incentives can be found by visiting www.westbasin.org.

Cooling Tower Retrofit Program

Cooling towers often are the largest users of water in industrial plants, office buildings, hospitals and other facilities with large air conditioning requirements. Automated monitoring and control systems can improve cooling system efficiency. In fact, towers retrofitted with conductivity or pH controllers can save as much as 3,000 gallons of water per day.

The Cooling Tower Retrofit Program targets buildings over three stories tall. Businesses will receive financial and technical assistance to retrofit their cooling towers with conductivity controllers or pH / alkalinity controllers. This program will launch in 2008.

Industrial Process Improvement Program

Industrial process water use provides another promising opportunity for water efficiency improvements. Few water conservation programs have been directed solely at process water use in the industrial sector.

Beginning in 2008, this new program will provide process-improvement surveys, customized incentives, and follow-up support to the approximately 1,300 small- to mid-sized West Basin industrial customers including those in food processing, textiles, electronics, industrial laundries, fabricated metals and dye houses.



As part of its agency-wide, water-saving initiatives, West Basin has introduced several programs designed to reduce the amount of water used for indoor and outdoor purposes.



INDOOR AND OUTDOOR RESIDENTIAL PROGRAMS

Since 1991, West Basin and its city and water agency partners have saved billions of gallons of water through indoor conservation programs. An estimated 50,000 water-efficient toilets and rebates have been distributed, as well as low-flow shower heads, sink aerators and washer rebates.

Since outdoor landscape irrigation accounts for over half of all water use, West Basin has also introduced several programs designed to reduce the amount of water used for commercial and residential irrigation purposes. West Basin is partnering with cities, water agencies, botanical gardens and nurseries to provide residents with native plant selection classes and new irrigation technologies.

In a unique partnership, West Basin and The Surfrider Foundation will launch an “Ocean-Friendly” Landscape Program in 2007 that will not only conserve water but also aid local communities in reducing dry weather runoff.

New Innovations

- ❑ “Smart” irrigation controllers save water by automatically adjusting watering schedules based on weather patterns.
- ❑ High-Efficiency Toilets use about 20% less water than conventional ultra-low-flush toilets that use 1.6 gallons per flush. Price decreases and customer incentives make it possible to distribute free toilets to the public. West Basin is also pursuing direct-installation opportunities within the multi-family sector, which includes apartment buildings, homeowners associations, condominium complexes, and mobile home parks.
- ❑ High-Efficiency Clothes Washer Rebates will continue as long as funding is available. These washers save 50% of water and energy use. In addition, clothes come out cleaner with less wear and tear.
- ❑ Free Landscape Surveys and Irrigation Equipment Incentives. Landscape professionals evaluate landscape areas, including soil and plant materials, and provide recommendations for enhanced water efficiency. Several incentives are also offered by West Basin to encourage commercial landscapers, homeowners, schools and parks to upgrade irrigation equipment.



Participants in landscape class learn about programming irrigation controllers for water use efficiency.



Educating the next generation of Southern Californians about the importance of water and water-use is a critical goal of West Basin's conservation program.

ADDITIONAL PROGRAM INITIATIVES

Just as visionary thinking secured our region's water supply goals decades ago, this same momentum continues to direct West Basin into the future. Our accomplishments in ocean-water desalination, water recycling and community outreach are just a few of the ways in which we reach "Beyond the Vision" to achieve a drought-proof water supply for our residents and businesses.

To further the District's efforts, several additional programs support our efforts in water conservation. These include the following:

Education and Training

Educating the next generation of Southern Californians about the importance of water and water-use is a critical goal of West Basin's conservation program. To this end, the District's educational outreach programs have consistently grown in popularity and scope.

Legislative Advocacy

West Basin actively supports local, state and federal legislation that promotes water-efficient practices and technologies.

Community Outreach

Public awareness is essential in promoting water conservation. West Basin provides cities and retail agencies with opportunities for support for conservation programs in their respective areas.

Partnerships

West Basin and the South Bay Energy Savings Center have joined forces to promote the interrelationship between water and energy use – and conservation. Now, South Bay residents, businesses and institutions have convenient access to energy and water savings products, rebates and information.

Grantsmanship

Through successful pursuit of grants and the generous contributions of various agency partners, West Basin is able to deliver approximately \$3.50 worth of conservation programs for every dollar it spends.



South Bay Energy Savings Center hosts event promoting water and energy conservation partnership.



Today, with 185 square miles of territory and an ever-growing population, the District fully recognizes the importance of meticulous planning of future resource needs.

WEST BASIN MUNICIPAL WATER DISTRICT

The West Basin Municipal Water District was formed in 1947 by the public to preserve underground water supplies by providing supplemental water. Today, with 185 square miles of territory and an ever-growing population, the District fully recognizes the importance of meticulous planning of future resource needs. Conservation is a critical resource component of the Integrated Resource Planning process; the goal being a master plan portfolio of conservation programs that deliver a high volume of water savings at a cost-effective price.

West Basin Municipal Water District is governed by a 5 member Board of Directors elected by the public. The District serves the Cities and communities of Carson, Palos Verdes Estates, Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, Inglewood, South Ladera Heights, a portion of Lennox and unincorporated areas of Athens, Howard and Ross-Sexton, Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach and unincorporated areas of Torrance, Culver City, El Segundo, Malibu, West Hollywood and unincorporated areas of Lennox, North Ladera Heights, Del Aire, Topanga, View Park and Windsor Hills, Gardena, Hawthorne, Lawndale and unincorporated portions of El Camino Village.





**WEST BASIN
MUNICIPAL WATER DISTRICT**

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