

# Regional Water Facilities Master Plan

# FUTUREFLOW

Fall 2003

## What It's all About

San Diego County currently relies on a single supplier of imported water for up to 90 percent of the water used in the region. Recognizing that a more diversified water supply would improve water reliability, the San Diego County Water Authority has developed the Regional Water Facilities Master Plan. Implementation of the master plan will open the door to additional water supply options and help ensure continued reliability of the region's water supply through 2030. The master plan identifies a diversified mix of water supply sources and proposes new water facilities and projects needed to deliver this water to the Water Authority's 23 member agencies throughout the county.

The Water Authority has prepared a Draft Program Environmental Impact Report to provide information about the potential environmental effects of the proposed master plan. In addition to identifying environmental concerns, the Program EIR outlines mitigation measures to address such concerns. Each project within the master plan will undergo its own environmental review before construction can be approved.

## Three Water Supply Alternatives

The master plan looks at future water demands and analyzes different ways to meet those demands. Three main water-supply alternatives are proposed:

- ~ **Alternative 1:** Delivering water from the north – A new pipeline to convey water from the Water Authority's current sole supplier, the Metropolitan Water District of Southern California
- ~ **Alternative 2:** Delivering water from the west – The Pacific Ocean and new seawater desalination facilities
- ~ **Alternative 3:** Delivering water from the east – A new pipeline extending to the Imperial Valley to convey water transferred from other water agencies

Alternative 2, seawater desalination, is the preferred alternative and provides the highest apparent degree of reliability. Seawater desalination emerged as the preferred alternative because it produces very safe, high-quality water through a locally controlled process from a drought-proof source, the Pacific Ocean.

**Want More Information?** Copies of the draft master plan in print or on CD are available by contacting the San Diego County Water Authority at (858) 522-6600. Or, visit the Water Authority's Web site at [www.sdcwa.org](http://www.sdcwa.org).

## Conserving our Most Precious Resource

In arid San Diego County, water conservation is not only smart, it is a necessity. By making efficient use of existing water resources, conservation reduces the region's overdependence on a single supplier of imported water.

Local residents and businesses are doing their part by installing and using water-efficient devices like ultra-low flush toilets, low-flow showerheads and high-efficiency clothes washers. These voluntary measures to conserve the region's water resources have reduced per capita water use. For example, the population in the Water Authority's service area grew by 17 percent between fiscal 1990 and fiscal 2003. Yet water use in 2003, a year with near-normal rainfall,

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The Water Authority is a public agency serving the San Diego region as a wholesale supplier of water. The Water Authority works through its 23 member agencies to provide a safe, reliable water supply to support the region's \$126 billion economy and the quality of life of its 3 million residents.

## Conserving

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was virtually the same as in 1990.

However, as the population and overall water use continue to increase, conservation is more important than ever. The next major focus for water savings is outdoor conservation. Here are some outdoor water-saving tips:

- ~ Check irrigation system for leaks and other problems once a month and correct promptly.
- ~ Check soil moisture before watering and water only when needed.
- ~ Use a broom instead of a hose to clean off sidewalks and decks.

## Fast Facts

**326,000**

Gallons of water that make up an acre-foot, or the amount of water used by two typical households in one year

**23**

Member agencies that depend on the San Diego County Water Authority as a wholesale supplier of water

**3 Million**

San Diego County residents who receive a safe and reliable water supply provided by the Water Authority

**43,000**

Acre-feet of water that were conserved in San Diego County last year through the use of water-efficient devices and water-wise irrigation practices

**2008**

The year the proposed Water Authority Desalination Facility at Encina could be operational

## Looking to the Sea

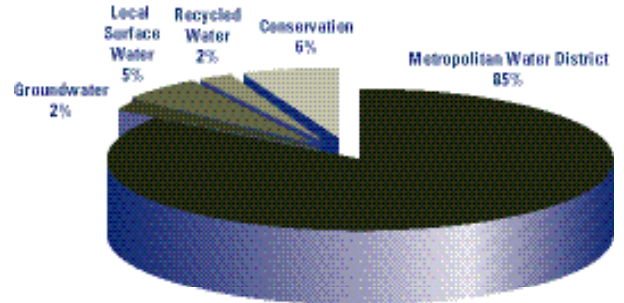
In the quest for new water sources, why not look to one of the largest bodies of water in the world — the Pacific Ocean? That is exactly what the San Diego County Water Authority is doing. Seawater desalination is now recognized as a viable and cost-effective water supply option for the region.

Drinking water is being produced from seawater through reverse osmosis in many countries around the world. This process has proved to be safe and effective in removing salts and other impurities from water. In reverse osmosis, seawater is forced at high pressure through layers of semipermeable membranes. The membranes allow the smaller water molecules to pass through while rejecting impurities including salts, viruses and bacteria, which are larger in size. Desalinated seawater is very safe, high-quality water suitable for drinking and other potable water uses. In recent years, new advances in reverse osmosis technology have made seawater desalination both more efficient and more cost-effective.

The Water Authority proposes to build a seawater desalination facility on the site of the Encina Power Station in Carlsbad. The Water Authority Desalination Facility at Encina would take advantage of the power station's existing seawater intake and discharge facilities. This provides significant cost savings and minimizes environmental impacts of construction and operation of the facility.

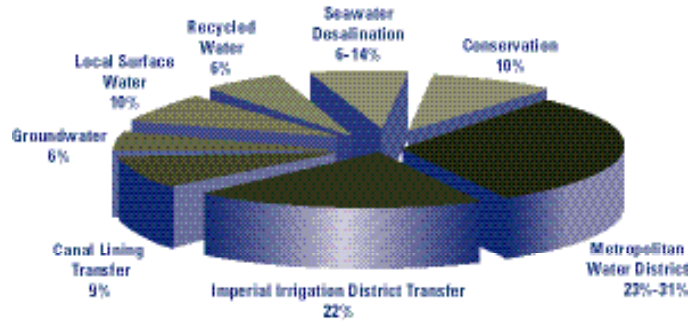
The proposed facility at Encina would be the largest seawater desalination facility in the Western Hemisphere. It would be similar to seawater desalination facilities around the world that are using advanced reverse osmosis technologies.

### Regional Water Supply Portfolio, 2003



Current diversification of water supply options for the San Diego region

### Regional Water Supply Portfolio, 2020



Projected diversification of water supply options for the San Diego region by the year 2020

## Presentations Coming to a Group Near You

The Regional Water Facilities Master Plan is a roadmap for implementing the major capital improvements needed to serve the San Diego region's projected water demands through 2030. Implementation of the master plan will help ensure a safe and reliable water supply for the Water Authority's 23 member agencies. To inform the community about the master plan, the Water Authority offers presentations to civic groups, community planning boards and other organizations throughout San Diego County. These presentations serve as a forum for Water Authority representatives to describe and answer questions about the master plan and the region's water supply.

*If your organization is interested and would like to schedule a presentation, please contact Lisa Gordon at 858-522-6716 or by e-mail at [lgordon@sdcwa.org](mailto:lgordon@sdcwa.org).*

## Frequently Asked Questions

### Q. What is the purpose of the master plan?

**A.** The master plan identifies sources of water to meet the region's water demands through 2030 and the capital improvements needed to bring that water to the Water Authority's 23 member agencies in San Diego County. The master plan was developed to meet four objectives:

- ~ To plan the water supplies and facilities required to meet future water needs in the region
- ~ To protect the public health, safety and welfare by maintaining a safe and reliable water supply
- ~ To plan facilities that are cost-effective
- ~ To provide the ability to adjust facility plans to meet changes in future demands

### Q. What kind of capital improvement projects are in the master plan?

**A.** The master plan identifies individual projects needed to rehabilitate existing Water Authority facilities, expand the capacity of the aqueduct system, increase production of treated water and provide additional water storage in San Diego County. Similar projects would be needed for any of the water supply alternatives.

### Q. When will the master plan become final?

**A.** The master plan will become final only after the Water Authority's board of directors certifies the Final Program Environmental Impact Report. The board is expected to consider certification in December 2003. At that time, the board may approve the master plan as a final document.

## California Environmental Quality Act (CEQA) Process

*for the Regional Water  
Facilities Master Plan*

Project Description defined  
*December 2002*

Notice of Preparation issued  
*Feb. 10, 2003*

Scoping meeting held  
*Mar. 5, 2003*

Draft Program EIR available  
for public review  
*Aug. 14, 2003*

Public hearing on Draft  
Program EIR  
*Sept. 25, 2003*

Final Program EIR and Response  
to Comments published  
*Fall 2003*

Water Authority board of  
directors certifies Program EIR  
*Anticipated December 2003*

Water Authority board adopts  
Findings and Mitigation  
Monitoring Program  
*Anticipated December 2003*

Notice of Determination issued  
by Water Authority board  
*Anticipated December 2003*

# We want to hear from you!

## Telephone:

- ~ To request a copy of the draft master plan in print or on CD please contact the Water Authority at 858-522-6600.
- ~ If you have questions about the master plan or seawater desalination please call the toll-free project information lines. Your call will be returned within one business day.

**Master Plan: 1-877-682-9283, Ext. 7004**  
**Desalination: 1-877-682-9283, Ext. 7006**

## Web Site:

Please visit the Water Authority's Web site at [www.sdcwa.org](http://www.sdcwa.org) for current program information on the master plan and an online version of the draft master plan.

## The San Diego County Water Authority **MASTER PLAN:**

- ~ Secures a safe and reliable water supply for the region
- ~ Is the long-term plan for the future that focuses on diversification of water supply
- ~ Is a "program," not a project, which focuses on planning, not construction
- ~ Balances reliability, cost-effectiveness and affordability
- ~ Incorporates water conservation as a vital solution in helping the region meet its water supply needs
- ~ Helps ensure San Diego's vibrant economy and quality of life



**San Diego County Water Authority**

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