

CHINO BASIN WATERMASTER

WORKING COLLABORATIVELY TO MAXIMIZE THE BENEFITS FROM THE CHINO GROUNDWATER BASIN



WELCOME TO CHINO BASIN!

Working collaboratively to maximize the benefits from the Basin, Chino Basin Watermaster is carrying out its mission:

***“TO MANAGE
THE CHINO
GROUNDWATER
BASIN IN THE MOST
BENEFICIAL MANNER,
AND TO EQUITABLY
ADMINISTER AND
ENFORCE THE
PROVISIONS OF
THE CHINO BASIN
WATERMASTER
JUDGMENT.”***

This year, Chino Basin Watermaster is making available at auction

36,000 acre-feet of water currently stored in the Basin. This unique opportunity is the result of changes in pumping demands over decades by businesses with overlying rights within the Basin. Those businesses, by agreement, can only make their water available to outside parties through the Chino Basin Watermaster. It is this water that is being offered at auction on November 4, 2009.

This unique opportunity, coupled with Watermaster’s need to finance tens of millions of dollars in infrastructure over the next six years, is creating a tremendous opportunity for water agencies, investment firms and anyone interested in securing the rights to actual water and storage within an adjudicated groundwater basin in Southern California.

Heralded as one of the best managed basins in California, the Chino Basin is perfectly situated to allow for maximum flexibility of use. Geographically, the Chino Basin lies within San Bernardino, Eastern Los Angeles and Western Riverside Counties with access to both Metropolitan Water District of Southern California and independent State Water Contractors infrastructure.

On behalf of the parties within the Chino Basin, we welcome your interest and participation in this important and unique water auction. We encourage you to find out more about the Chino Basin Watermaster and this exclusive offer being made by visiting our website at www.CBWM.org/waterauction or call us at (909) 484-3888.

*Kenneth R. Manning
CEO, Chino Basin Watermaster*

Making Water Available in a Time of Drought

THE AUCTION

CALIFORNIA'S "PERFECT STORM" WATER SHORTAGE

Watermaster's primary responsibility is to help meet the water supply and water quality needs of the Chino Basin area by managing the Chino Groundwater Basin. By itself, this is a challenging task because the area has been experiencing explosive growth in recent years.

Ten consecutive years of rainfall below the 20th century average—including one of the driest years ever recorded—have been aggravated by recent developments in statewide water supplies.

Environmental restrictions on imported water from the Delta mandated by the courts, cutbacks in Colorado River supplies, a statewide drought, rising costs and increasing water demand have all contributed to making water more scarce and more valuable than ever.

The state has recognized that there will be ongoing water shortages by asking all Californians to cut water use 20% by 2020. Metropolitan Water District of Southern California recently raised its water rates, pre-announced another increase in 2011, and made clear that local areas must increasingly solve their own water supply problems.

The long-term prognosis for imported water supplies is clear: pay more for less water.

CHINO BASIN IS OFFERING WATER FOR SALE

Chino Basin Watermaster has thirty years of experience managing the groundwater within the 225 square mile area of Western San Bernardino, Eastern Los Angeles and Western Riverside Counties. That experience, along with judicial authorization, provides potential buyers of this precious resource the confidence necessary to be a part of this historic event.

Watermaster is offering for sale at auction, 36,000 acre-feet of water in four separate blocks of 9,000 acre-feet. The water is already in the ground and the right to store and withdraw it has been approved by the Court.

All parties are welcome to bid. This is a unique opportunity for those that have a need for water or for those who wish to invest in it.



Leading the Way in Basin Management

THE ORGANIZATION

WATERMASTER'S EARLY DAYS: "WATER IS FOR FIGHTING..."

In decades past, Chino Basin was a living example of the old adage, *"whiskey is for drinking, water is for fighting over."*

Stakeholders—agricultural, municipal, commercial, and industrial, along with many individuals—competed, disagreed and litigated over water issues. There was no mechanism to ensure a long-term water supply or sufficient quality.

By the early 1970s, however, progress had been made toward a more cooperative approach. An effective, consensus-based governance structure was gradually developed that allowed all stakeholders to actively participate in decision-making through various Watermaster working committees and Board of Directors.



The result is a rarely found combination of technical and management skills that is grounded in research, factual knowledge, forward thinking and collaborative governance.

COLLABORATIVE ORGANIZATION AND GOVERNANCE TEAM

By 1978, the San Bernardino County Superior Court established a new entity, the Chino Basin Watermaster. It was comprised of three stakeholder groups, called Pools, represented by separate Pool Committees:

- Overlying Agricultural Pool Committee, representing dairymen, farmers and the State of California
- Overlying Non-Agricultural Pool Committee, representing area industries
- Appropriative Pool Committee, representing local cities, public water districts, and private water companies.

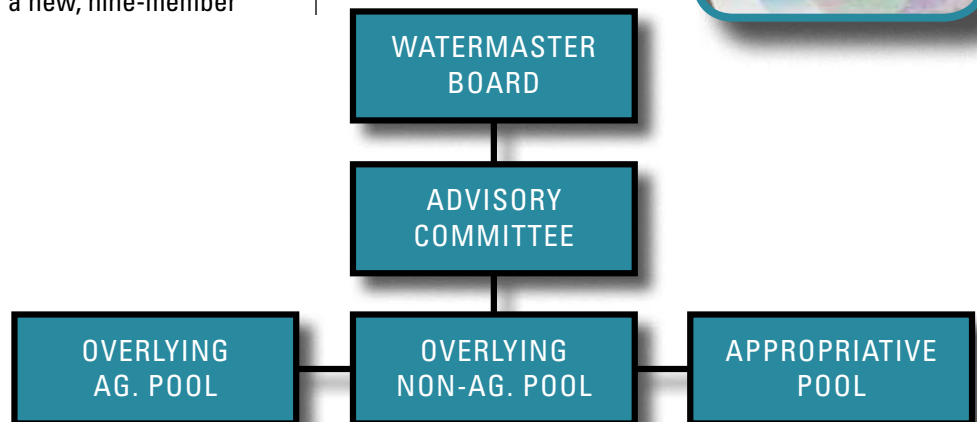
Completing these governance arrangements, representatives from the three Pools formed an Advisory Committee to oversee the normal regular activities of Watermaster. In 1998, with support from the Advisory Committee, the Court appointed a new, nine-member Watermaster Board.



This governance structure is supported by a team of professional staff members and independent consulting experts that has developed an unmatched technical understanding of the Basin, providing support to the governance committees and the Board.

A MODEL OF TEAMWORK

The result is a rarely found combination of technical and management skills that is grounded in research, factual knowledge, forward thinking and collaborative governance. All parties have a voice, and everyone participates in governing and managing the Basin's precious water resource.



THE OPTIMUM BASIN MANAGEMENT PROGRAM

TWO TRILLION GALLONS, 800 WELLS, ONE MILLION RESIDENTS

The Chino Groundwater Basin is a massive underground reservoir—stretching over 220 square miles. Its water storage capacity is estimated to be six million acre-feet, or two trillion gallons! The unused storage capacity is about 1 million acre-feet, which is larger than any surface water reservoir in Southern California. More than 140,000 acre-feet are pumped from the Basin every year from over 650 wells.

The Basin provides the basic water supply for nearly a million residents of the Inland Empire. It is also the primary water source for thousands of businesses and industries, as well as for a thriving agricultural sector.

THE BASIN'S ROADMAP

Painstakingly developed over many years, and based on the best technical and economic information available, the Optimum Basin Management Program (OBMP) is a detailed action plan for protecting and improving the Chino Basin. It includes hundreds of specific projects that are identified, prioritized, budgeted and scheduled for implementation over a twenty-year period.

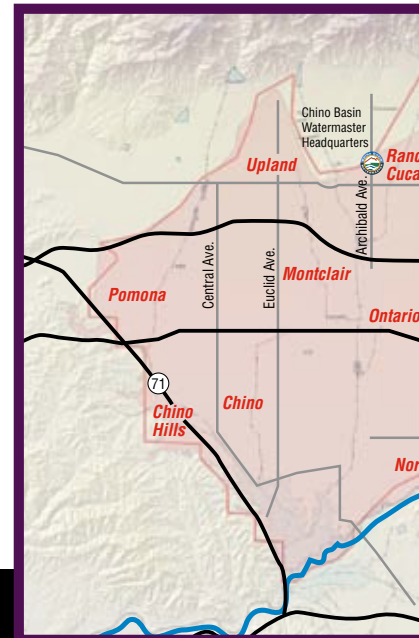
A challenging task is to provide additional water supplies to meet the area's growing needs, improve water quality, protect the local environment and contribute to economic growth. Watermaster has pressed forward to increase the expansion of water supplies—recycled water, desalted groundwater and stormwater, with a water efficiency and conservation program—to maximize all available local resources.

OBMP: NINE SEPARATE YET RELATED TASKS

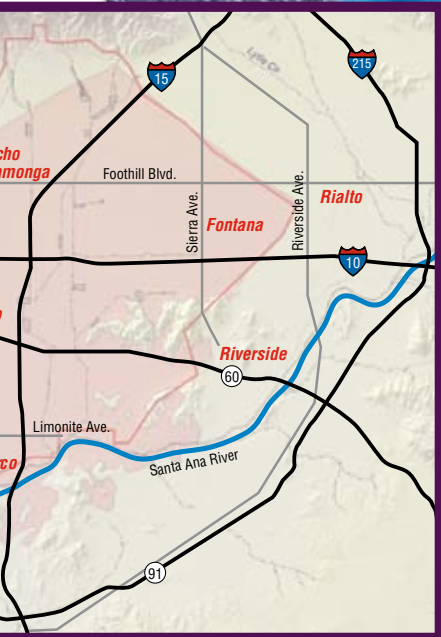
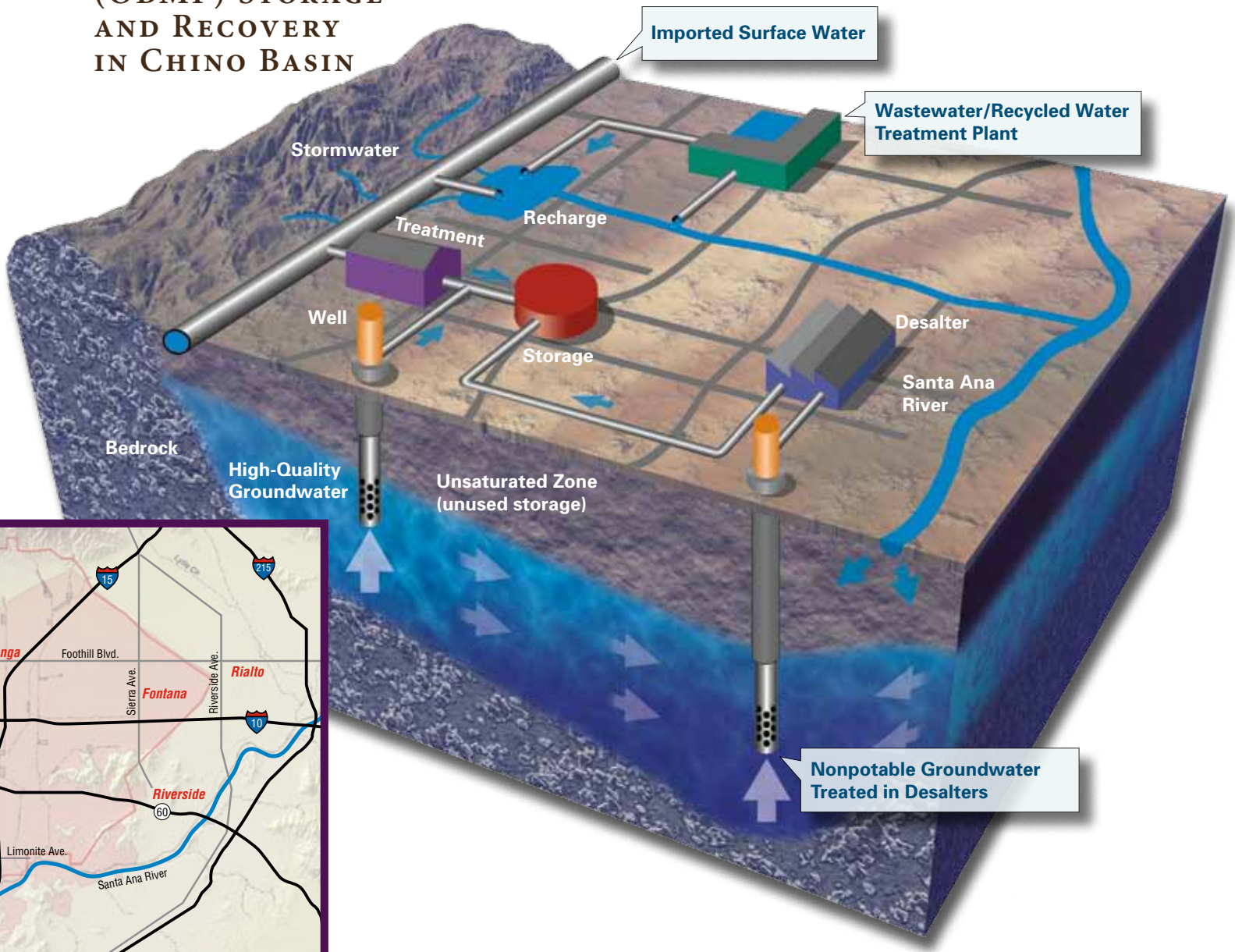
To accomplish these results, the Optimum Basin Management Program encompasses nine major, interrelated tasks:

1. **Comprehensive Monitoring Program** for groundwater levels, productions, quality and more
2. **Comprehensive Recharge Program**
3. **Water Supply Plan** for the Impaired Areas of the Basin to improve water quality and supply
4. **Regional Supplemental Water Program**
5. **Comprehensive Groundwater Management Plan** for MZ1 to stop land subsidence
6. **Cooperative Programs** with the Regional Board and other agencies to improve Basin management
7. **Salt Management Program**
8. **Groundwater Storage Management Program**
9. **Conjunctive Use Programs.**

The Optimum Basin Management Plan has been followed rigorously, and is notable for its strong policy direction as well as its detailed specifics. It has paved the way for the extraordinary successes achieved by Watermaster in managing the Basin.



(OBMP) STORAGE AND RECOVERY IN CHINO BASIN



Cooperation, Planning and Technology Are Keys to Successful **BASIN MANAGEMENT**

WATERMASTER'S MANAGEMENT GUIDELINES

To assure that the Basin will continue to meet the area's needs, Watermaster follows key policy guidelines:

Maintain and increase water supply. Acquire and spread replacement water, and facilitate the storage of supplemental water in the Basin.

Ensure fair sharing of the water. Determine the amount of groundwater each producer is entitled to extract without incurring a replenishment obligation.

Provide cooperative leadership. Develop consensus plans regarding management of the Basin.

Monitor and increase understanding of the Basin. Collect information on water production, water quality, water levels and other relevant data.

Maintain and improve water quality. Coordinate and actively participate in programs to restore and preserve the quality of groundwater in the Basin.

In following these guidelines, Watermaster brings together the Chino Basin stakeholders, consisting of dozens of public and private entities that pump, treat, buy, sell and/or deliver water in the Basin. Watermaster serves as a central forum for Basin water stakeholders to manage the Basin.



WATERMASTER AND STAKEHOLDERS BUILD ON SUCCESSES

Watermaster is continually updating its engineering, financial and scientific analysis of virtually all aspects of Basin management. Watermaster's depth of technical understanding forms the foundation for all the beneficial water supply and water quality activities that have occurred in recent decades.

Watermaster and the Basin stakeholders first learned to settle differences and to work together, then to develop and implement innovative management plans. Watermaster and the Inland Empire Utilities Agency have demonstrated the ability to raise local and grant funding, making it possible for Watermaster and the basin stakeholders to rapidly implement water supply and quality programs.



PEACE II AGREEMENT ENSURES LONG-TERM PROGRESS

The decades-long collaboration of Watermaster's many stakeholders has resulted in tremendous financial and water supply benefits. The signing of the precedent-setting Peace II Agreement among all stakeholders will:

- **Enable the construction of desalters** to produce and treat about 40,000 acre-feet per year of groundwater
- **Maximize the reuse of recycled water**
- **Provide upwards of \$900 million of benefit** to the Chino Basin parties
- **Increase the safe yield** of the Basin by up to 8,000 acre-feet per year or more
- **Provide up to 400,000 acre-feet of replenishment water** for the desalters
- **Create 400,000 acre-feet of new storage space** in the Basin.

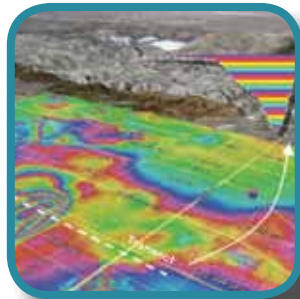
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Chino Basin Watermaster RECENT ACHIEVEMENTS

ALL CONTAMINATION PLUMES UNDER REMEDIATION OR INVESTIGATION

Watermaster works with the Regional Water Quality Control Board and other involved parties to ensure that groundwater quality is protected and enhanced. Watermaster's water quality role is to provide technical information, enforce regulations and provide cooperative leadership. Today, all contaminant plumes in the Basin are under remediation or investigation.

Peace II is resulting in improved flexibility in managing the Basin's water supply, and \$1 billion in long-term cost-savings.



3-D COMPUTER MODEL UPDATED

A sophisticated 3-D computer model has been developed to analyze the groundwater Basin, providing immediate value. For example, the model identified the need to draw down the Basin by 400,000 acre-feet of water to prevent water from seeping out of the Basin, resulting in what's called hydraulic control of the Basin. This 400,000 acre-feet of water will be used to provide water supply benefits for the Basin and save hundreds of millions of dollars in replenishment costs.

EXPANDED CAPACITY TO RECHARGE THE BASIN

A substantial amount of rainwater percolates naturally into the groundwater Basin. But this is not adequate to meet water demand. Chino Basin Watermaster and its partners have expanded capacity to artificially replenish the groundwater basin from a few thousand acre-feet per year in 2000 to over 90,000 acre-feet in 2008. Historically, the region depended on using imported water available in winter for replenishment. Watermaster and its partners can now replenish water year-around using stormwater, imported water and recycled water.



USING TECHNOLOGY AND HYDROGEOLOGIC UNDERSTANDING TO INCREASE RECYCLED WATER RECHARGE

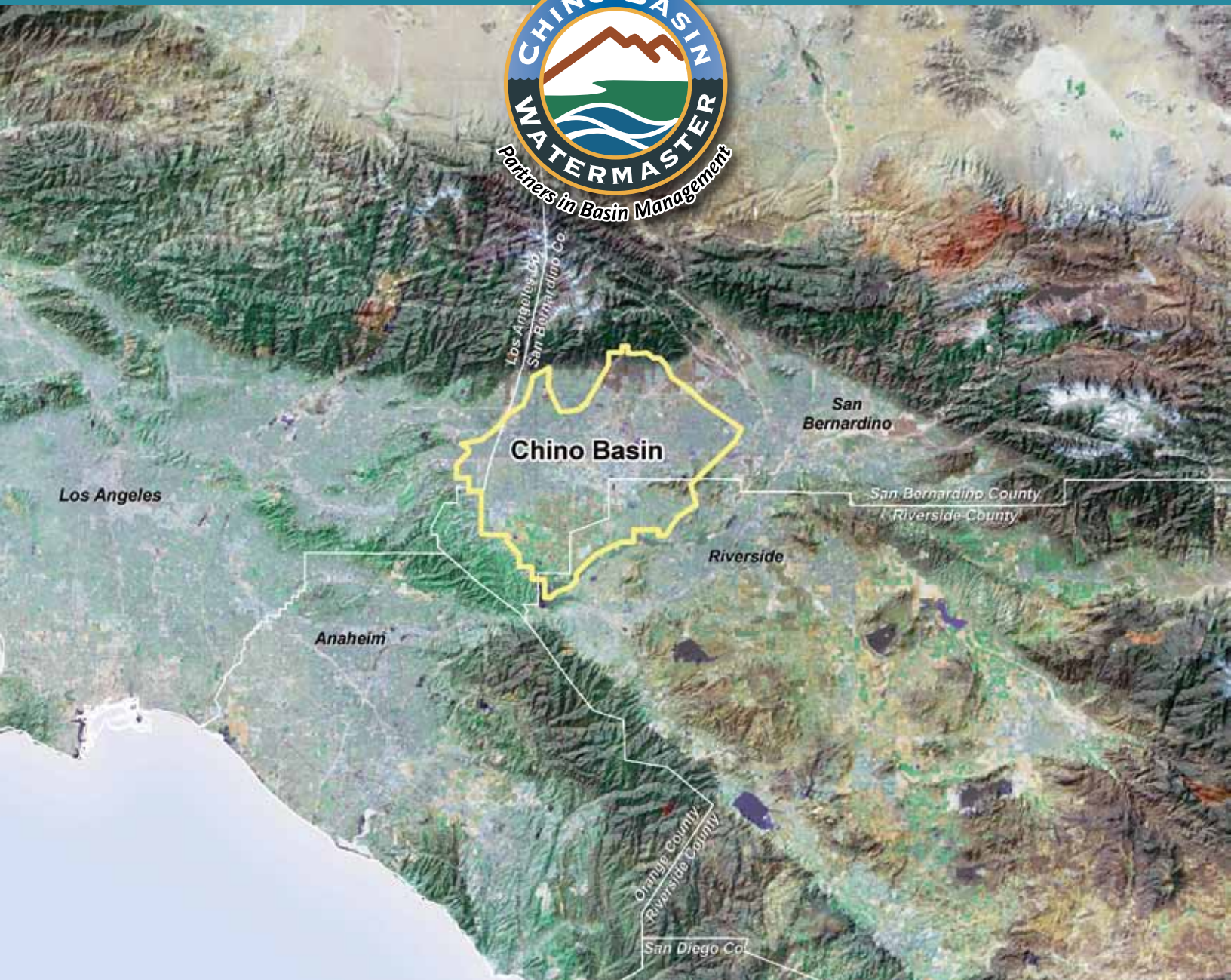
In a very significant development, Watermaster and Inland Empire Utility Agency demonstrated to regulators that significantly more recycled water could be recharged than previously thought. Data from lysimeters (soil water sampling devices) showed that the percentage of recycled water that could be used in recharge basins while maintaining groundwater quality could increase from about 20 percent to as high as 35 percent. This will allow for significantly more recycled water recharge in the future, greatly increasing water reliability in the region.

SATELLITE TECHNOLOGY ASSISTS IN GROUNDWATER PLAN DEVELOPMENT

Synthetic aperture radar (InSAR) is satellite-based, high-resolution imagery that Watermaster uses to help in hydrogeologic analysis and groundwater plan development.



CHINO BASIN WATERMASTER



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