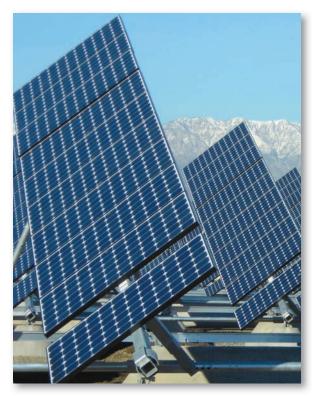


ocated in San Bernardino County and serving approximately 850,000 residents in a 242-square mile service area, the Inland Empire Utilities Agency (IEUA) focuses on supplying imported water; collecting, treating, and recycling wastewater; and providing other utility-related services to the communities it serves. The Agency strives to provide these services in a regionally planned, managed, and cost-effective manner. IEUA serves the cities of Chino, Chino Hills, Fontana, Montclair, Ontario and Upland, as well as the Cucamonga Valley and Monte Vista Water Districts.

Formed in 1950, IEUA is a member agency of the Metropolitan Water District of Southern California (MWD). Although the majority of the water served throughout the region comes from local groundwater, surface runoff, and recycled water, one-third of the water distributed by IEUA is imported from MWD through the State Water Project. As a result, IEUA has been a leader in water conservation and recycling projects to ensure that local water supplies are secure and to reduce dependence on costly imported water from northern California.



Purple pipes indicate recycled water which is used to water golf courses, medians and parks.



Solar panels provide nearly 100% of peak power demands at IEUA's Regional Water Recycling Plant No. 5.



Inland Empire Utilities Agency LEED™ headquarters.

### **RECYCLED WATER**

IEUA owns and operates four regional facilities that currently produce over 53 million gallons per day of recycled water. Along with its local cities and water agencies, IEUA has demonstrated tremendous foresight by planning and implementing an expansive, state-of-the-art recycled water program. High-quality recycled water is used to irrigate public spaces, such as parks, schools, golf courses, street medians, as well as for industries and farming preserving valuable drinking water supplies for human consumption.

A milestone for IEUA's Regional Recycled Water Program this year was the recent completion of IEUA's Northwest Recycled Water Project. This project will provide an additional 1,300 acre-feet each year of new water – enough for approximately 10,000 people. "Since recycled water is the only new significant water supply we have and is the ultimate water conservation measure, the Northwest Recycled Water project is another way of replenishing our local water aquifer, helping us to be self-sufficient and decreasing the need to rely so heavily on costly imported water supplies," stated IEUA Board President Terry Catlin. "IEUA's goal is to have 50,000 acre-feet of recycled water usage by 2022," continued Catlin.

### RENEWABLE ENERGY

At a time when renewable resource management is imperative to maintain a high level of service while mutually promoting environmental awareness, IEUA has developed a strategic Energy Management Plan with a specific focus on energy independence from the regional grid during the peak energy usage hours. "Energy represents the largest controllable cost for water and wastewater agencies," said IEUA Board Vice President Michael Camacho who represents IEUA on the Metropolitan Water District's Board of Directors. "IEUA's initiative of Going Gridless by 2020 will be accomplished through energy efficiency improvements and increased renewable energy generation, such as solar, wind, and fuel cells," stated Camacho.

### The Going Gridless by 2020 plan includes:

- Solar panels, located at four of IEUA's water recycling plants, which collectively generate up to 3.5 megawatts of clean solar power. During peak daylight hours, the thousands of solar panels produce 20% of the power used at the Agency's facilities, generating enough electricity to power more than 2,500 homes.
- A 1 megawatt wind turbine generator, located at IEUA's water recycling facility in Rancho Cucamonga, will supply up to 2.2 million kilowatt-hour each year - 20% of the electricity consumed by the facility.
- The addition of fuel cells at IEUA's water recycling plant in Ontario will generate 2.8 megawatts of power and will be fueled primarily with renewable biogas. The system is expected to supply approximately 70% of the annual electricity consumed by the plant. Methane produced from the Ontario plant's anaerobic digester will be used to generate electricity while by-product heat will be used to heat biosolids to facilitate anaerobic digestion, resulting in up to 70% energy efficiency.

"Many of these renewable energy projects are being implemented through public-private partnerships," commented IEUA Secretary/ Treasurer Steven J. Elie. IEUA provides the host site, while the outside companies establish the technology and are responsible for the funding, construction, operations and production of power. By entering



Wind power.

into power purchase agreements (PPAs), IEUA will purchase power at a lower cost than what is expected from a traditional utilities company. "Through these partnerships, IEUA is able to implement these projects with minimal risk, without expending capital, and while demonstrating cost savings," said Elie.



#### **COMPOST**

The Inland Empire Regional Composting Facility (IERCF) processes over 200,000 tons of waste products per year into a valuable soil amendment. The IERCF is an excellent example of IEUA's ability to provide a regional sustainable solution to its biosolids management. "It represents a less expensive and more reliable solution for the disposal of our region's organic material rather than costly, long distance trucking;

therefore saving taxpayers' money and creating a beneficial product," stated Camacho. The soil amendment from IERCF's compost also produces beautiful landscapes while requiring only about two-thirds the amount of water. "That is a huge savings in water since 60% of the water we use at home is for outdoor irrigation," added Camacho.

# GROUNDWATER RECHARGE

The Chino Basin Groundwater Recharge Program (GWR), jointly sponsored by IEUA, Chino Basin Watermaster, Chino Basin Water Conservation District, and the San Bernardino County Flood Control District, was put into place to enhance water supply reliability. Groundwater recharge facilities, a combination of flood control retention basins and new recharge basins, have been improved to enhance stormwater capture and to increase capacity. "These basins, located throughout the IEUA service area, are designed to hold the water so that it can percolate into the ground and replenish our aquifers and groundwater supply," remarked IEUA Board Member



Gene Koopman. In addition to stormwater, IEUA recharges approximately 10,000 acre feet of recycled water each year. Groundwater recharge assists in mitigating future water shortages in California caused by limitations on imported water and provides subsurface reserve of groundwater for local use. "Traditionally IEUA's recycled water has been captured and recharged by downstream water agencies for decades," said Koopman. "We are now closing the loop, by using our water more efficiently. Rather than discharging it to the river, IEUA is now storing it within our aquifers for future use within our region," added Elie.

#### OUTREACH

In order to secure future water supplies, IEUA is committed to promoting smart water use and having an active presence in our local communities. "The Chino Creek Wetlands and Educational Park is open to the public and



provides a hands-on opportunity for the community to experience the importance of constructed wetlands in the protection of our watershed," stated IEUA Board Member Gene Koopman. The Park improves water quality, flood control, habitat restoration, recreation, water conservation and public education. The Santa Ana Watershed Association (SAWA) is the Agency's partner for park tours and education programs. "This past Earth Day over 2,000 visitors enjoyed the many exhibits stationed throughout the park," added Santiago.

Since 2005, IEUA has reached over 20,000 students with its award winning Garden in Every School® program. The purpose of the Garden in Every School® program is to educate the school family and community about wise-water usage through a garden landscape, featuring drought-tolerant plants and efficient irrigation methods.

"Environmental stewardship serves as a core value of the agency" states Catlin. "It is our goal to take the necessary steps to provide a high quality water supply while saving energy, reducing the need for additional electricity from the grid, and reducing greenhouse gas emissions. Essentially these initiatives are steps toward sustainable resource management, an area where the Inland Empire Utilities Agency is recognized as a national leader."

State and Federal agencies have financially assisted in many of IEUA's projects. These include: California Integrated Waste Management Board, U.S. Department of Energy, California Department of Forestry and Fire Protection, California Department of Parks and Recreation, California Energy Commission, Federal Emergency Management Agency/California Emergency Management Agency, U.S. Department of Agriculture-Natural Resources Conservation Service, Western United Resource Development, Inc., California Public Utilities Commission through Southern California Gas Company Self Generation Incentive Program, California Solar Initiative Southern California Edison, and State Water Resources Control Board, U.S. Department Of Interior, Bureau of Reclamation, Metropolitan Water District of Southern California, California Department of Water Resources, and WateReuse Foundation.

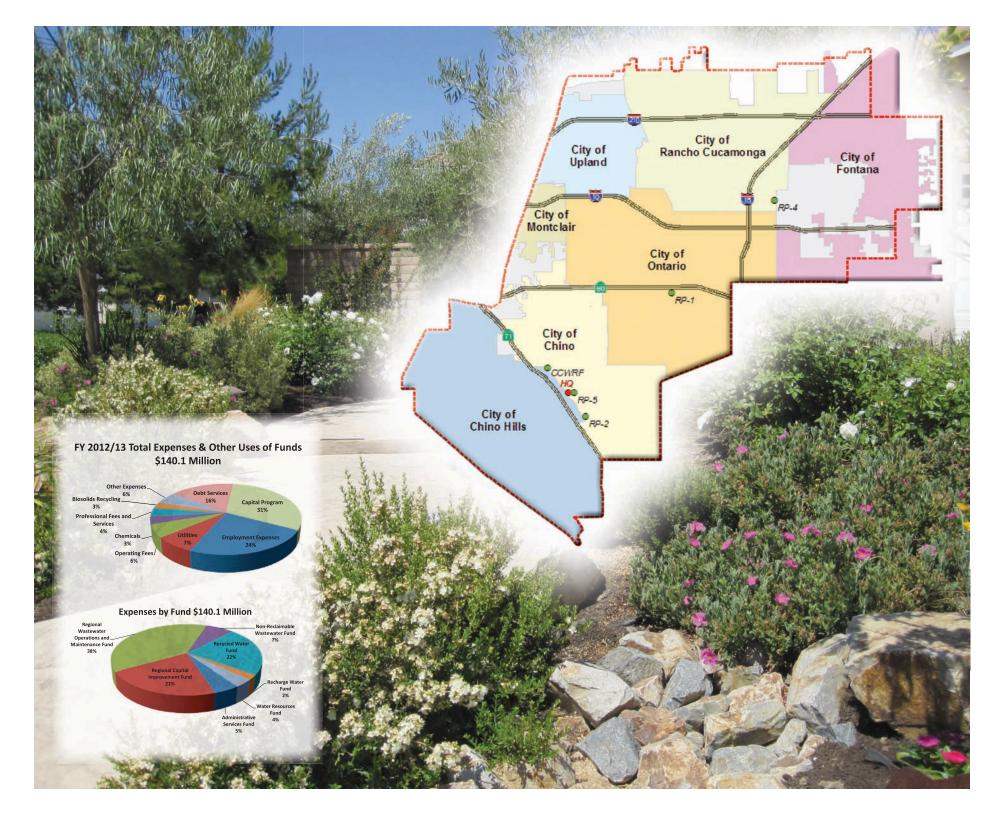
(The contents of this document do not necessarily reflect the views and policies of any of the above referenced agencies, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. Gov. Code, § 7550, 40 CFR §31.20)

# SALINITY MANAGEMENT

Salt is the single most important constraint in southern California to using local groundwater supplies as it is costly to remove and corrodes water treatment infrastructure and pipelines. IEUA continues to be a leader in water supply salt management, for the purpose of protecting the regions vital groundwater supplies. As part of the Salinity Management Action Plan, IEUA adopted an ordinance banning future installations of self-regeneration water softeners in its service area. "On average, a single self-regenerating water softener contributes up to 30 pounds of salt each month into the wastewater treatment system which ultimately ends up in our recycled water supply," stated IEUA Board Member Angel Santiago. "In May 2012, the Agency reached a milestone of removing 100 tons of salt from its municipal wastewater flows. This will protect our infrastructure and recycled water supplies," concluded Santiago.



IEUA, in partnership with Western Municipal Water District, the Chino Basin Desalter Authority, and it's federal delegation secured a \$4 million U.S. Bureau of Reclamation grant to increase our source of drinking water in the Inland Empire. The \$4 million federal WaterSMART grant will fund a portion of the planned Phase 3 Expansion of the Chino I and Chino II Desalter facilities. IEUA is committed to providing a secure, local, reliable water source and expanding the desalters will produce an additional 10,600 acre-feet of potable water each year - enough water for over 80,000 people.



# **Inland Empire Utilities Agency**

62 Years of Excellence in Water Resources and Quality Management



6075 Kimball Avenue, Chino, CA 91708 909 993-1600 ieua.org