

ANNUAL REPORT

Fiscal Year 2020-2021





Message from the General Manager

As a supplemental water provider, the Inland Empire Utilities Agency (IEUA/Agency) has been committed to developing local water resources, providing wastewater treatment services and ensuring a clean, reliable water supply to the Chino Basin region for over 70 years. Year after year, what remains unchanged is the Agency's unwavering dedication as a steward of the region.

IEUA's service to the community is more vital than ever before. The State's drought conditions have rapidly intensified throughout the region, with 2021 being the driest water year recorded in a century. Despite the Department of Water Resources' recent announcement for an increase in State Water Project allocation from zero to 15 percent, California continues to experience drought conditions with January 2022 being the driest January on record. California's declining water storage levels highlight the value and necessity of IEUA's water-use efficiency efforts, as well as its investments to diversify the region's water supply as an environmental steward for the community.

The Agency's Board of Directors recognize the value of innovative, forward-thinking projects that will help address the Chino Basin region's rapid growth. As we continue our commitment to serving the region, reducing reliance on imported water sources and improving resiliency while keeping costs low for the community, the Agency will continue to develop, expand and improve existing infrastructure in preparation for the State's changing climate and increased drought conditions. One of the major milestones accomplished during FY 2020/21 was the groundbreaking for the Regional Water Recycling Plant No. 5 (RP-5) Expansion Project (RP-5 Expansion), the largest project to-date for the Agency. In addition, the Agency continues to invest in and

develop innovative storage projects to enhance resiliency efforts within the region, including the Chino Basin Program. The Chino Basin Program would involve the construction of an advanced water treatment facility and distribution system to treat and store up to 15,000 acre-feet per year of recycled water in the Chino Groundwater Basin and would provide groundwater production capacity of 40,000 acre-feet per year, improving water quality and addressing historical land subsidence within the Chino Basin region. These projects and programs serve as prime examples of ways to secure future water resources for our region.

In the midst of restrictions set in place due to COVID-19, IEUA successfully maintained its daily operations and wrapped up a remarkable year full of achievements and accomplishments that have been brought forth by the Agency's dedicated and exceptional team. During FY 2020/21, IEUA received nine awards across the Agency, broke ground for the Agency's largest construction project, successfully hosted its first Virtual Earth Week event, sold three million cubic yards of compost, secured over \$3.6 million in grant funding, and attained so much more even with the challenges presented by COVID-19.

I am proud to be the general manager for such a remarkable Agency, and the amount of work and achievements delivered by staff within the past year speaks volumes on the resiliency, adaptability and dedication exemplified by our team here at IEUA.

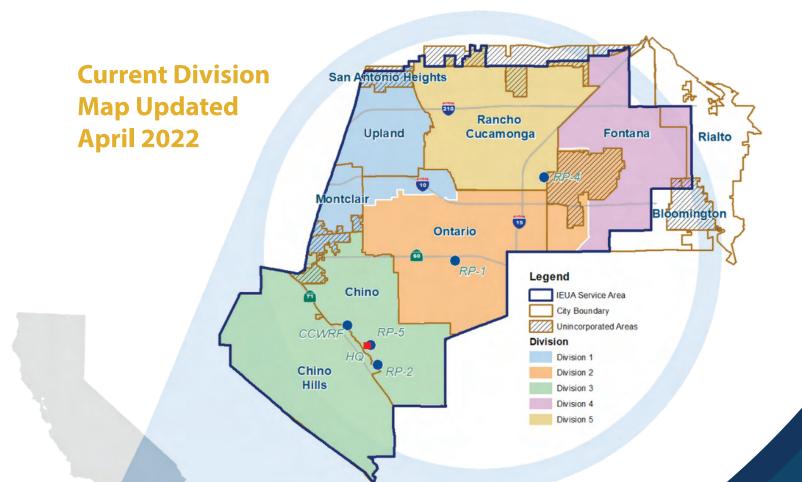
We look forward to what the future holds as we continue to provide services that align with our commitment to fiscal responsibility, water reliability and environmental stewardship.

Alivaji Desemuci

Shivaji Deshmukh, P.E. General Manager

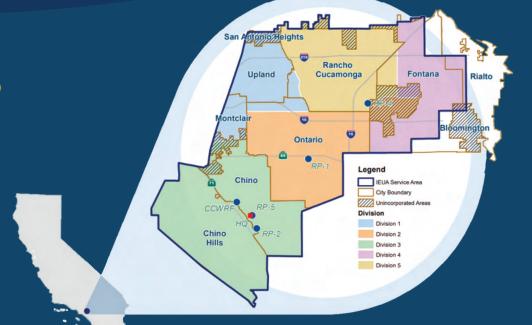
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*California Water Code requires municipal water districts to adjust division boundaries after each decennial U.S. census. Based on census information, this map was adopted April 2022.

Previous Division Map



Service Area

IEUA is responsible for serving approximately 875,000 residents over 242-square miles in western San Bernardino County.

Inland Empire Utilities Agency is governed by a five member Board of Directors who are elected to staggered four year terms by registered voters within their divisions as defined by the division boundary map.

Board of Directors

Effective January 1, 2022

Steven J. Elie - President Representing Division 3

Michael Camacho - Vice President Representing Division 5

Marco Tule - Secretary/Treasurer Representing Division 1

Jasmin A. Hall- Director Representing Division 4

Paul Hofer - Director Representing Division 2 **General Manager** Shivaji Deshmukh, P.E.

Deputy General Manager Christiana Daisy, P.E.

General Counsel Jean Cihigoyenetche



Inland Empire Utilities Agency is committed to meeting the needs of the region by providing essential services in a regionally planned and cost effective manner while safeguarding public health, promoting economic development and protecting the environment. Key areas of service:

- Securing and supplying imported water;
- Collecting and treating wastewater;
- Producing high-quality renewable products such as recycled water; compost and energy;
- water supplies.



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To become a world class leader in water management and environmental stewardship, including water quality, water-use efficiency, recycled water, and renewable energy, in order to enhance and preserve the quality of life throughout the region.



Values

Leading the way. Planning for the future. Protecting the resources of the communities we serve. The Inland Empire Utilities Agency is committed to:

- Applying ethical, fiscally responsible, transparent and environmentally sustainable principles to all aspects of business and organizational conduct;
- region's diversity;
- innovation, efficiency, and creativity.

About Us

The Inland Empire Utilities Agency is located in western San Bernardino County and serves approximately 875,000 residents in a 242-square mile service area.

As a regional wastewater treatment agency, the Agency provides sewage utility services to seven contracting agencies under the Chino Basin Regional Sewage Service Contract: cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and Cucamonga Valley Water District (CVWD) in the city of Rancho Cucamonga.

In addition to the contracting agencies, the Agency provides wholesale imported water from the Metropolitan Water District of Southern California to seven retail agencies: the cities of Chino, Chino Hills, Ontario, Upland, CVWD in the city of Rancho Cucamonga, Fontana Water Company in the city of Fontana, and the Monte Vista Water District in the city of Montclair.

• Promoting sustainable use of groundwater and development of local

• Working with integrity as one team, while celebrating the

• Staying in the forefront of the industry through education,

	Water Reliability		Environmental Stewardship		Fiscal Responsibility	
Chino Desalters	12	Energy Optimization	19	Financials	23	Education
Wastewater Treatment	13	Groundwater Recharge	21	Grant and Loan Awards	25	Owlie's Virtual Adventu
Regional Water Recycling Plant No. 5 Expansion	15	Composting and Biosolids Management	22		No Wipes Down the Pi	
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Community Outreach and Education

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Chino Basin Desalter Authority

The Chino Basin Desalter Authority (CDA) was formed under a Joint Exercise of Powers Agreement on September 25, 2001 by regional agencies including the cities of Chino, Chino Hills, Norco, and Ontario, IEUA, Jurupa Community Services District, Santa Ana River Water Company, and Western Municipal Water District (formally admitted on April 2, 2009).

The CDA purifies brackish groundwater extracted from the Chino Basin with the Chino I and II Desalter facilities and distributes the drinking water to its member agencies. The Chino I and II Desalters serve the dual purpose of providing a reliable water supply and managing groundwater quantity and quality in the region.

IEUA operates the Chino I Desalter, which commenced operations in 2001.

Total Water Delivered by End User: (MG = million gallons, AF = acre-feet, in which 1 AF = 325,851 gallons)

City of Chino = 1,637.8 MG or 5,026.6 AF City of Chino Hills = 1,379.6 MG or 4,234.1 AF Jurupa Community Services District = 1,180.1 MG or 3,621.7 AF

Total Well Water Pumped = 5,191.4 MG **Total Ion Exchange Effluent =** 1,004.03 MG

Supplemental Water

As a member of the Metropolitan Water District of Southern California (MWD), IEUA is the supplemental water provider for western San Bernardino County. Approximately 35 percent of the water used in the region in FY 2020/21 was imported from the State Water Project through MWD.

Total water consumption within IEUA's service area for FY 2020/21 was 202,776 acre-feet (AF). Compared to FY 2019/20, potable water use increased 4 percent from 175,829 AF to 183,242 AF and recycled water direct use increased 14 percent from 17,115 AF to 19,534 AF. Overall, the region is using approximately 11 percent less water than FY 2013/14 when total consumption peaked at 227,586 AF.

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Total Reverse Osmosis Feed Water (Includes Permeate and Concentrate) = 4,084.5 MG

Wastewater Treatment Process

Preliminary Treatment 1.

> Wastewater passes through bar screens or rakes to remove large inorganic material, followed by the removal of smaller inorganic materials such as sand and grit.



Primary Treatment 2.

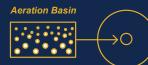
As wastewater goes through sedimentation tanks, approximately 65 percent of the suspended solids are removed.



Primary Clarifie

Secondary Treatment 3.

This is the biological process for reducing the concentration of organic pollutants in wastewater, reducing in excess 90% of the organic material in the wastewater.



Secondary Clarifie

Tertiary Treatment 4.

Water is filtered to remove suspended organic solids and is disinfected using sodium hypochlorite.



Wastewater Treatment

IEUA owns and operates four facilities specializing in regional water recycling services. The Agency's water recycling plants collectively take in approximately 50.1 million gallons per day (MGD) of wastewater for treatment. Several treatment processes contribute to providing high quality recycled water pursuant to California's Title 22 regulations.

Recycled Water

IEUA began selling recycled water in the 1970s as a low-cost alternative to potable water for large irrigation customers. Since 2000, IEUA and its local water providers have invested in a program to expand delivery of high-quality recycled water, thus improving sustainability of the region's water supply. To date, IEUA has more than 1,200 connections to the recycled water distribution system.

Recognizing the critical role of recycled water in the long-term water security plan of the Chino Basin, IEUA adopted a policy and entered into agreements with its contracting member agencies to maximize the use of recycled water.

IEUA is committed to the development of its recycled water infrastructure so that all recycled water produced through its wastewater treatment process can be beneficially used.

Recycled water uses include: agricultural, landscaping, golf courses, industrial cooling, parks, recreational lakes, groundwater recharge, median strips, and more.

As demand for potable water increases, the future availability of drinking water for irrigation is guestionable. Utilizing recycled water for irrigation and other purposes is making use of a valuable resource that would otherwise be disposed of.

During FY 2020/21, the average amount of water supplied from IEUA's facilities was approximately

56.140

or

million gallons per day (MGD)

acre-feet per year (AFY)

Solids Treatment Facility Elements:

- Rotary drum thickening building
- Digester facilities
- Centrifuge dewatering building
- Boiler building
- Digester gas treatment and flaring
- Food waste receiving
- Improvements to existing energy recovery engines

Liquids Expansion Elements:

- Influent pump station expansion
- Headworks improvements
- Fine screen facility
- Two new primary clarifiers
- Existing aeration basin improvements
- New membrane bioreactor (MBR)

REGIONAL WATER RECYCLING **PLANT NO. 5** EXPANSION PROJECT

RP-5 EXPANSION

IEUA's Regional Water Recycling Plant No. 5 (RP-5) is located in the city of Chino and has been in operation since 2004. The RP-5 Expansion Project will expand RP-5's liquid treatment capacity from 16.3 MGD to 22.5 MGD and includes infrastructure for the plant's ultimate buildout to treat an average flow of 30 MGD and a peak flow of 60 MGD.

Regional Water Recycling Plant No. 2 (RP-2) has been in operation since 1960 and currently handles the solids that are removed from Carbon Canyon Water Recycling Facility and RP-5. The U.S. Army Corps of Engineers will be raising the spillway height of nearby Prado Dam and as a result, RP-2 will fall within the dam's floodplain. Before completion of the spillway project, a new solids treatment facility will be constructed at RP-5 to allow for the decommissioning of RP-2.

The RP-5 Liquids Treatment Expansion and the RP-5 Solids Treatment Facility will be constructed under one construction contract, RP-5 Expansion Project, with two separate milestones. The milestones will be established to differentiate the time needed to complete the solids treatment work necessary to facilitate the decommissioning of RP-2.

The construction cost totals \$450 million with low interest rate loans secured from the U.S. Environmental Protection Agency Water Infrastructure Finance and Innovation Act and the State of California Clean Water State Revolving Fund for \$196 million and \$101 million in loans respectively. The project was also granted \$5.9 million sales and use tax exclusion from the California Alternative Energy and Advanced Transportation Financing Authority.

The solids treatment facility is anticipated to be complete by the beginning of 2024 with the liquids treatment expansion following soon after in 2025.

IEUA's Board of Directors awarded the construction contract to W.M. Lyles Co. on July 15, 2020. W.M. Lyles Co. started construction on January 4, 2021. As of June 30, 2021 the contractor has been paid 16.2 percent of the contract (\$53.4 million), and the contract is 21.3 percent complete (320 days).

Water Quality Laboratory

IEUA's Water Quality Laboratory is located at its headquarters in Chino, California and supports the regulatory requirements of the Agency's wastewater reclamation plants and the Groundwater Recharge Program.

The laboratory is assessed and certified by the State Water Resources Control Board (SWRCB) through its Environmental Laboratory Accreditation Program (ELAP) to perform compliance testing for National Pollutant Discharge Elimination System (NPDES) and California Division of Drinking Water permit compliance monitoring, as well as industrial and domestic wastewater discharge monitoring for the Agency's Pre-Treatment and Source Control processes.

On May 5, 2020, the SWRCB adopted comprehensive regulations required by ELAP to modernize the program and improve data quality for California communities. The regulations were approved by the Office of Administrative Law and went into effect January 1, 2021. Laboratory staff is currently

evaluating operations and will be implementing the needed changes as dictated by the new accreditation standard to be fully compliant by January 1, 2024.

The laboratory uses sophisticated equipment such as a Gas Chromatograph for pesticides, an Ion Chromatograph for Nitrate and a Gas Chromatogram using a Mass Spectrophotometer for Trichloroethene. The laboratory was recently approved for 1,2,3 Trichloropropane testing and is now looking to add PFAS testing using liquid chromatography with a tandem Mass Spectrometer. Staff is continuously evaluating new technologies to stay current and ready for new or more stringent regulations such as lower monitoring levels for perchlorate, which went into effect on July 1, 2021.

The Agency's education programs include educational tours of the lab, showcasing the building and its water quality functions for students in kindergarten through twelfth grade and the community.

Our water samples are collected from over 100 locations.



Approximately <u>20,000</u> samples are gathered annually and ran through:



Extractions



Gas Chromatography







Toxicity

Total Coliform

Pb Zn Metals

Fe Hg Na) ²⁰Ca

Metals Analysis Bioassavs

Wet Chemical Analysis





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Annually, the Agency analyzes over 60,000 tests for:

Organic Compounds

Inorganic Compounds

Environmental Stewardship

The Agency is committed to the responsible use and protection of the environment through conservation and sustainable practices.

Energy Optimization

IEUA's renewable portfolio was strategically developed by identifying how available resources, such as wastewater treatment infrastructure and available land, could be applied to incorporate environmentally friendly technologies capable of producing power at a rate comparable to grid import pricing. IEUA successfully incorporated solar, wind and battery storage into its facilities to reduce its demand on the electric grid. Utilizing public-private partnerships, IEUA did not have to provide any capital required for the projects and benefitted from the reduced rates for energy costs.

Energy storage is key to maximizing the value of resource investments, allowing the Agency to use resources more efficiently, reduce costs for customers and participate in building a more resilient grid for the entire region.



5 MW Solar Power

Portfolio History

 IEUA entered into a Power Purchase Agreement (PPA) with a private company and had 3.5
megawatts (MW) of solar panels installed at four of IEUA's facilities in 2008. Since installation, IEUA has consumed approximately 76,800 megawatt hours
(MWh) of power generated from the solar panels.
In 2010, IEUA expanded its renewable energy
storage systems optimize IEUA's on-site generation including solar and wind. Since the start of the operation in January 2019, the solar has generated an estimated 5,580 MWh of power.
The batteries store excess renewable energy and use stored energy to power facilities when demand on the electric grid is high. The energy

In 2010, IEUA expanded its renewable energy portfolio by securing another PPA for a 1.0 MW wind turbine at Regional Water Recycling Plant No. 4 (RP-4) in Rancho Cucamonga. The wind turbine was commissioned in early 2012 and has generated approximately 3,613 MWh since startup.

IEUA partnered with an energy firm to install 4.0 MW of advanced energy storage systems at Agency facilities and 1.5 MW of solar at the Inland Empire Regional Composting Facility. The

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The batteries store excess renewable energy and use stored energy to power facilities when demand on the electric grid is high. The energy storage systems also enhance the Agency's ability to share the benefits of renewable resources between facilities.

The Agency's Energy Optimization programs generated 10 percent of the electricity consumed from renewable energy for the fiscal year. The renewable energy generated by IEUA in FY 2020/21 would be able to provide electricity to at least 673 homes for one year. In FY 2020/21, IEUA recharged **4,883 AF** of stormwater/local runoff, delivered **2,396 AF** of imported water and **16,253 AF** of recycled water.

Recycled water direct usage was

17,115 AFY

Composting and Biosolids Management

In 2002, IEUA entered into a Joint Powers Agreement with the Los Angeles County Sanitation Districts to create the Inland Empire Regional Composting Authority (IERCA). The IERCA designed and constructed a composting facility in Rancho Cucamonga called the Inland Empire Regional Composting Facility (IERCF). The IERCF is the largest fully enclosed composting facility in North America and has been in operation since 2007, recycling biosolids and amendments such as woodwaste and greenwaste needed for the composting mixture.

Over the past 14 years, IERCF has cost-effectively provided and manufactured an exceptional quality compost with an excellent safety record and a perfect environmental compliance record.

Groundwater Recharge

IEUA, Chino Basin Watermaster, Chino Basin Water Conservation District, and San Bernardino County Flood Control District jointly sponsor the Chino Basin Recycled Water Groundwater Recharge Program. This program was put in place to enhance water supply reliability and drinking water quality throughout the greater Chino Basin.

Aquifers naturally filter groundwater to enhance recharge water quality as it passes through the underground sedimentary layers. As part of the recycled water program, IEUA has enhanced the capacities of the Groundwater Recharge Program recharge sites to help replenish the area's aquifers. Use of these recharge sites improves the reliability of the local groundwater supply for a growing population.

Located throughout IEUA's service area are 18 recharge sites designed and operated to capture runoff from storms, imported water from the Metropolitan Water District of Southern California and high-quality recycled water from IEUA's distribution system.

For FY 2020/21, IERCF processed:

150,217 tons of biosolids

IERCF produced <u>218,235 cubic yards of Seal of Testing Assurance (STA)</u> <u>Certified Compost</u> sold under the brand name SoilPro Premium Compost. The compost was sold to landscapers and farmers throughout southern California to create healthy soils which require far less water to support plant life. **Amendments are elements added to soil to improve its capacity to support plant life.*

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41,121 tons of amendments



FY 2020/21	(\$ in millions)		
Operating Revenues	\$155 M		
Connection Fees	\$42 M		
Property Taxes	\$67 M		
Grants & Loans	\$36 M		
Other Revenues	\$9 M		

Total Funding Sources: \$309 million

*Other revenues include contract cost reimbursements from CDA, IERCA and Chino Basin Watermaster as well as interest revenues and lease revenues.

The Agency remains committed to cost containment and optimizing grant funding and low-interest loans to support capital investments in the region to mitigate future rate increases.

The Agency is committed to safeguarding its fiscal health through organizational efficiency and the adoption of balanced multiyear budgets and rates. The Agency provides open and transparent communication to educate partner agencies and the communities it serves on IEUA's fiscal policies.

Audited Actuals

Operating revenues of \$155 million account for 50 percent of total revenues and include \$91 million in service charges for the Agency's regional programs, \$46 million pass-through sales of imported water, and \$18 million of recycled water sales. The remaining 50 percent of revenues and other funding sources are non-operating revenues comprised of property tax receipts and fees from new connections to the Agency's regional wastewater and water distribution systems. Other revenues include cost reimbursement for the Agency's operation of the Inland Empire Regional Composting Authority, Chino 1 Desalter, and groundwater recharge basins.

Expenses and other uses of funds totaled \$309 million and include operating expense and debt service costs of \$167 million, capital project expenditures of \$102 million included costs for the RP-5 Expansion, RP-4 Process Improvements, and RP-1 Mechanical Restoration projects. Total fund balance increased by \$41 million, primarily from non-operating revenues designated to support the Agency's capital improvement plan.

Contribution to Fund Balance **\$41 million**

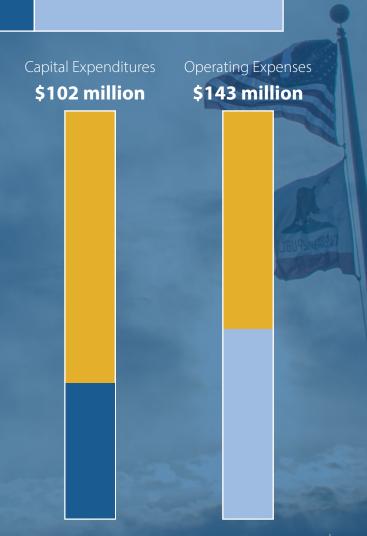
Debt Service Cost **\$24 million**

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\$309 million



IEUA Secured \$29,461,508 in grant funding and low-interest loans during FY 2020/21

Federal, State and local agencies have provided financial assistance for many of IEUA's projects. These include: U.S. Department of Interior - Bureau of Reclamation, U.S. Environmental Protection Agency, U.S. Department of Energy, U.S. Department of Agriculture-Natural Resources Conservation Service, Federal Emergency Management Agency/California Emergency Management Agency, California Department of Water Resources, California Department of Public Health (presently State Water Resources Control Board), California Department of Forestry and Fire Protection, California Department of Parks and Recreation, California Energy Commission, California Water Commission, California Public Utilities Commission, State Water Resources Control Board, California Alternative Energy and Advanced Transportation Financing Authority, California Integrated Waste Management Board, California Special Districts Association, Metropolitan Water District of Southern California, Santa Ana Watershed Project Authority, Western United Resource Development, Inc., 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)

Chino Basin Improvement and Groundwater Cleanup Operations and Maintenance Project

State Water Resources Control Board (SWRCB) Proposition 68 Operations and Maintenance Grant

The Chino Basin Improvement and Groundwater Cleanup Project, a collaborative effort between IEUA and Chino Desalter Authority (CDA), will extract and treat contaminated groundwater from the South Archibald Plume. This Project will remove trichloroethylene (TCE) from the groundwater to expand the drinking water supply safely and effectively within the Chino Basin. The SWRCB awarded \$1,000,096 to IEUA and CDA for the costs of operating and maintaining the extraction, conveyance and treatment systems required to remove TCE.

RP-1 Disinfection Improvements Project

State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund (CWSRF) Loan

The RP-1 Disinfection Improvements Project will enhance the facility's chemical dosing process, which eliminates harmful pathogens to meet regulatory discharge and recycled water reuse permit limits by retrofitting aging tertiary treatment infrastructure, modifying pumping equipment to optimize chemical deliveries, and upgrading infrastructure. The improvements will improve water quality, system reliability, and process efficiencies. The project was included for funding in the SWRCB's Intended Use Plan to cover project costs in the amount of \$8,460,000.

Philadelphia Force Main Improvements Project

State Water Resources Co (CWSRF) Loan

The Philadelphia Force Main pipelines transport the non-reclaimable waste, collected at the Philadelphia Lift Station to the Los Angeles County Sanitation Districts for treatment. This project, which was approved for a \$20,001,412 low-interest loan in the SWRCB's Intended Use Plan, will install new force main pipelines, plug valves for isolation, air relief valves, and blow-offs. The project will also add clean outs along the existing dual force main every 500-feet to provide effective maintenance access points and mitigate future accumulation of solids buildup in the force main due to lack of maintenance.

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\$20,001,412

\$1,000,096

\$8,460,000

State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund

Community Outreach and Education

As part of IEUA's commitment to environmental stewardship, the Agency offers educational programs and takes part in community outreach. These efforts focus on water supply, renewable resources and environmental sustainability.

Education

IEUA invests in our future generations and provides a range of programs offered to kindergarten through twelfth grade students. These programs include: Water Discovery Field Trips to the Chino Creek Wetlands and Educational Park, Garden in Every School® Program (GIES), educational assemblies for children through the National Theatre for Children Program (NTC), Solar Cup[™] competition, and more. Many IEUA education programs were suspended or adapted to an online alternative during FY 2020/21 due to COVID-19.

Water Discovery Field Trip

Due to COVID-19, in-person field trips were suspended during FY 2020/21. The Agency adapted to the changes by launching a virtual education program, Owlie's Virtual Adventures, which includes a virtual learning model for the Water Discovery Program.

The Chino Creek Wetlands and Educational Park is partially funded by a grant from the SWRCB.

Water Scout Badge Program

IEUA's Water Scout Badge Program allows local Boy Scouts and Girl Scouts to earn a "Water Scout Fun Badge" while learning about water resources, native plants and sustainability. The program consists of a 16-page workbook that will take them on a scavenger hunt of the Chino Creek Wetlands and Educational Park. Once the workbook has been completed, the scout group leader can contact IEUA to coordinate a badge pickup. To learn more about the Water Scout Badge Program, visit www.ieua.org/water-scout-badge-program/.



Virtual Earth Week

IEUA and the city of Chino presented "Virtual Earth Week," a week-long virtual event that provided attendees the opportunity to explore the Chino Creek Wetlands and Educational Park in an immersive 360° realm. The virtual event was designed to provide a full experience that substituted various aspects of the in-person event and ranged from educational activities, navigating through resources provided by external vendors, learning about our environmental resources and how to protect them, enjoying an environmental show, and even participating in opportunities for free giveaways! The online platform made this event easily accessible for students, parents, teachers, and the whole family regardless of timing, scheduling and materials needed. The event generated over 5,000 page views and reached over 500 students in the span of one week.

Owlie's Virtual Adventures

Due to the effects of COVID-19, IEUA has adapted to the changing needs of the current educational landscape by launching Owlie's Virtual Adventures to transition its education programs to a virtual learning model. Owlie's Virtual Adventures offers a series of free, online resources such as Wally's Water Conservation Camp, virtual field trips, and At-Home Activities that stem from IEUA's popular Water Discovery Field Trip Program. For more information on Owlie's Virtual Adventures, visit www.ieua.org/owlies-virtual-adventures/.

Since inception, more than 1,000 students have participated in Owlie's Virtual Adventures virtual field trip program, which includes field trips hosted during IEUA's virtual Earth Day event. With most of the program's activities accessible on IEUA's website, teachers, parents and other community members are able to utilize all of the different resources without having to contact IEUA directly.



At-Home Activities

IEUA launched a series of At-Home Activities as a virtual method for parents and teachers to educate their students about water resources, water-use efficiency methods and environmental issues. The At-Home Activities provide a detailed lesson plan that incorporates hands-on activities taken from our Water Discovery Field Trip Program. The activities align with California State Curriculum Standards; Science, Technology, Engineering, Arts and Mathematics (STEAM) components; and Next Generation Science Standards (NGSS) for grades K-12. The Agency is releasing follow-along, how-to videos that correspond to the At-Home Activities. To access the Agency's resources for At-Home Activities, visit www.ieua.org/at-home-activites/.

Wally's Water Conservation Camp

Wally's Water Conservation Camp is a 20-day, digital at-home activity guide that was created under Owlie's Virtual Adventures. The goal of this program is to combat the increased screen time caused by COVID-19 while creating an engaging, family-friendly guide of activities that promotes water education and a healthy lifestyle. The Wally's Water Conservation Camp guide can be accessed by visiting www.ieua.org/wallys-water-conservation-camp/.

National Theatre for Children

The National Theatre for Children Program (NTC) delivers a package of live theater, student curriculum and teacher guides focused on messages utilizing a custom-designed program covering water uses, the importance of water, ways to conserve, and ways water becomes polluted. The program caters to students K-6. During FY 20/21, NTC introduced virtual performances to adhere to the evolving COVID-19 pandemic. Over the last year, NTC conducted 16 virtual shows for 38 elementary schools throughout IEUA's service area, reaching 18,051 students and 823 teachers.

Water is Life

Using the theme "Water is Life," students in grades K-12 in IEUA's service area are invited to create an original art poster depicting various water uses, ways to use water more efficiently or water conservation topics. For more information regarding the "Water is Life" student art poster contest, visit www.ieua.org/learn-about-water/student-art-poster-contest/.

Solar Cup[™] 2.0

Solar Cup[™] 2.0 is a digital program that was created to replace the original Solar Cup challenge where high school teams had the opportunity to build and design solar-powered boats. This new challenge focuses on virtual design and development, report writing, webinars, video scripting and development, and more. Co-sponsored by IEUA and the city of Chino Hills, students from Chino Hills High School's Solar Cup[™] team were recognized for a total of nine awards in 2021.

- Blender Challenge 1st place
- Robotics Challenge 1st place
- Electronics Challenge 1st place
- Green Career Challenge 1st place
- Solar Vehicle Challenge 2nd place

No Wipes Down the Pipes

IEUA began promoting its award winning "No Wipes Down the Pipes" campaign during FY 2019/20 to address sewer line issues caused by "flushable" wipes. As toilet paper shortages due to COVID-19 contributed to this preexisting concern, this campaign highlighted awareness and understanding of water quality issues by utilizing social media platforms such as Facebook, Instagram, Twitter, YouTube, LinkedIn, and Nextdoor. The goal of this campaign is to promote public awareness for what should and should not be flushed. During FY 2020/21, the Agency was presented with CWEA's Community Engagement & Outreach – Best Use of Social Media Award on behalf of the Agency's "No Wipes Down the Pipes" campaign. To view messaging for this campaign, visit IEUA's social media channels.

Get social with us!

IEUA utilizes Facebook, Instagram, Twitter, YouTube, LinkedIn, and Nextdoor to promote the Agency's functions, education, news, water conservation practices, and general water awareness. Follow us on social media to stay up to date with the latest news!



@IEUAwater

- Public Service Announcement 2nd place
- Onshape Challenge 3rd place
- Teamwork Award
- Spirit of Solar Cup Award Bart Bezyack Award Samantha Olivar of Chino Hills High School







@chinocreekwetlands

Water-Use Efficiency

To achieve water-use efficiency (WUE) goals, IEUA offers a suite of WUE programs that are designed to positively impact individual long-term behavior regarding efficient water use.

For FY 2020/21, there were approximately 4,804 water-saving technologies/services deployed throughout the region. The water savings achieved through these regional WUE activities is approximately 537 AFY, with an estimated lifetime savings of 3,017 AF. In total, IEUA's WUE activities result in a cumulative lifetime water savings of 150,388 AF since 1992. As mandated by State legislation, sustained reduction in water use will be met by the combined efforts of IEUA's Member Agencies and IEUA's continued commitment to implementing innovative WUE programs that reiterate the importance of using water wisely. Many of these programs have been made possible through funding partnerships with regional, State and Federal agencies, including MWD, Department of Water Resources, U.S. Bureau of Reclamation, and public/private partnerships.

Water Saving Technologies/ **Services** Deployed

Inland Empire Utilities Agency



Residential Pressure Regulation Program



Residential Landscape Installation and Retrofit Programs



Residential Pilot Leak Detection Program



Residential and Commercial Turf Replacement Program



Residential Landscape **Tune-up Program**



Funding support for **Member Agency Locally Implemented Programs**



Residential and Commercial **Device-Based** Rebates

Awards



The U.S. Department of Defense Employer Support of the Guard and Reserve Program (ESGR): "Patriot Award"

The U.S. Department of Defense ESGR "Patriot Award" is not awarded to an entire staff or organization as a whole, but recognizes individual supervisors who provide support for citizen warriors through measures such as flexible schedules, time off prior to and after deployment, caring for families, and granting leaves of absence if needed. Recipients of this award include IEUA staff members Shivaji Deshmukh, General Manager; Randy Lee, Executive Manager of Operations/Assistant General Manager; Robert Delgado, Manager of Operations and Maintenance; and Albert VanBreukelen, Deputy Manager of Maintenance.



The U.S. Department of Defense ESGR: "Above and Beyond Award"

The U.S. Department of Defense ESGR "Above and Beyond" Award recognizes employers who have gone above and beyond to provide Guard and Reserve employees additional non-mandated benefits that surpass the legal requirements of the Uniformed Services Employment and Reemployment Rights Act (USERRA). The USERRA protects servicemembers and veterans from discrimination in the workplace based on their military affiliation and ensures they return to work after military service. To qualify for this award, the employer must sign or agree to sign an ESGR Statement of Support and have had at least one supervisor/manager recognized with a Patriot Award.



Government Finance Officers Association of the United States and Canada: Certificate of Achievement for Excellence in Financial Reporting

For the 22nd consecutive year, IEUA has been awarded the distinguished Certificate of Achievement for Excellence in Financial Reporting award by the Government Finance Officers Association of the United States and Canada for its annual comprehensive financial report for FY 2018/19. This award is the highest form of recognition in government accounting and financial reporting.



American Society of Civil Engineers Sustainable Category Award

The American Society of Civil Engineers (ASCE) San Bernardino-Riverside Branch presented the Sustainable Category Award to IEUA, in partnership with Chino Basin Watermaster, for the San Sevaine Basin Improvements Project. The San Sevaine Basin Improvements Project, located near the city of Rancho Cucamonga, has an overall goal of ensuring water supply reliability in the region, which includes offsetting overproduction, enabling future growth and demands, and serving as a reliable alternative to imported water. Improvements to this basin would increase stormwater recharge to 642 AFY and increase recycled water by 4,100 AFY.

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The California Association of Sanitation Agencies Public Outreach & Education – Large Agency Award

The California Association of Sanitation Agencies (CASA) awarded IEUA with the 2020 Public Outreach & Education – Large Agency Award for the Agency's newest education program, "Owlie's Virtual Adventures." This award recognizes the development and implementation of programs that impact or educate the local community on issues important to the industry. Programs eligible for the award include those used for general public awareness, select target audiences and education in schools.

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The California Water Environment Association (CWEA) presented IEUA with the Community Engagement & Outreach – Best Use of Social Media Award (First Place Overall) on behalf of the Agency's "No Wipes Down the Pipes" campaign and highlights achievements in promoting awareness and understanding of water guality issues using social media. The campaign was completed fully in-house and advocates for the proper disposal of wipes and various hygiene products while educating the public on the negative impacts these actions impose on city infrastructure.

Project of the Year (Small Budget) Award

CWEA presented IEUA with the Community Engagement & Outreach – Project of the Year (Small Budget) Award on behalf of the Agency's Water Discovery Program that has shifted to a virtual platform and is now a resource under the Agency's newest education program, "Owlie's Virtual Adventures." Like the social media campaign, the education program was completed fully in-house in response to a shift towards a virtual learning environment. The program offers a variety of free, educational resources and can be accessed online by visiting www.ieua.org/owlies-virtual-adventures/.



CWEA presented IEUA with an Engineering & Research – Engineering Achievement Award on behalf of the Agency's San Sevaine Basin Improvements Project and recognizes outstanding projects by an individual, group or agency. The project is a partnership between IEUA and Chino Basin Watermaster with the goal of increasing local groundwater supply in the Chino Basin area in order to reduce the region's dependency on imported water and increase local resiliency to drought.



CWEA presented IEUA with a second Engineering & Research – Engineering Achievement Award on behalf of the Agency's Regional Water Recycling Plant No. 1 (RP-1) 12kV Switchgear and Generator Controls Replacement Project. The project replaced the 12kV switchgear and generator controls with modern technology to increase reliability of RP-1 and provide safety and flexibility for IEUA's Operations and Maintenance staff.

Inland Empire Utilities Agency

The California Water Environment Association Community Engagement & Outreach – Best Use of Social Media Award (First Place Overall)

The CWEA Community Engagement & Outreach –

The CWEA Community Engineering & Research -Engineering Achievement Award (San Sevaine Basin)

The CWEA Community Engineering & Research – Engineering Achievement Award (Regional Water Recycling Plant No. 1)

IEUA in Numbers FY 2020/21



Educational Outreach Events/Presentations

218,235 Cubic Yards of STA Certified Compost Produced





4,883 AF Stormwater/Local **Runoff** captured

> new hire interviews conducted

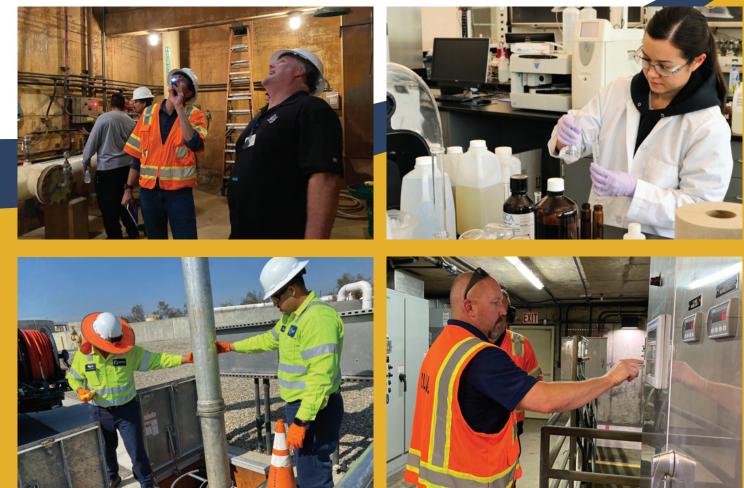


Water Saving Technologies/ Services Deployed



Workplace

The Agency believes its employees are its most valuable asset and promotes a dynamic work environment anchored in the foundational attributes of safety, employee engagement, accountability, respect, efficiency, performance coaching, and continuous learning. Operating with the highest ethical principles and standards, the Agency continues to adapt its workforce to reflect the community it serves and meet the needs of its diverse members. As part of the commitment to fostering a workplace environment that is diverse, equitable and inclusive, IEUA has taken leadership role in regional career path development efforts by pursuing innovative partnerships with workforce development programs. Additionally, the Agency continues to engage in more inclusive practices with the focus of addressing tomorrow's workforce needs today.





*Employees pictured are adhering to all health and safety guidelines.

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