



**LOS ANGELES COUNTY
SANITATION DISTRICTS**
Converting Waste Into Resources

2019

Annual Report



In 2019, we turned wastewater and trash into:

48

BILLION GALLONS OF RECYCLED WATER

78

MEGAWATTS OF ELECTRICITY

305,000

TONS OF RECYCLED COMMODITIES

160,000

TONS OF COMPOST

MISSION

To protect public health and the environment through innovative and cost-effective wastewater and solid waste management and, in doing so, convert waste into resources such as recycled water, energy, and recycled materials.



RECYCLED WATER



GREEN ENERGY



RECYCLED MATERIALS

CORE VALUES

INTEGRITY

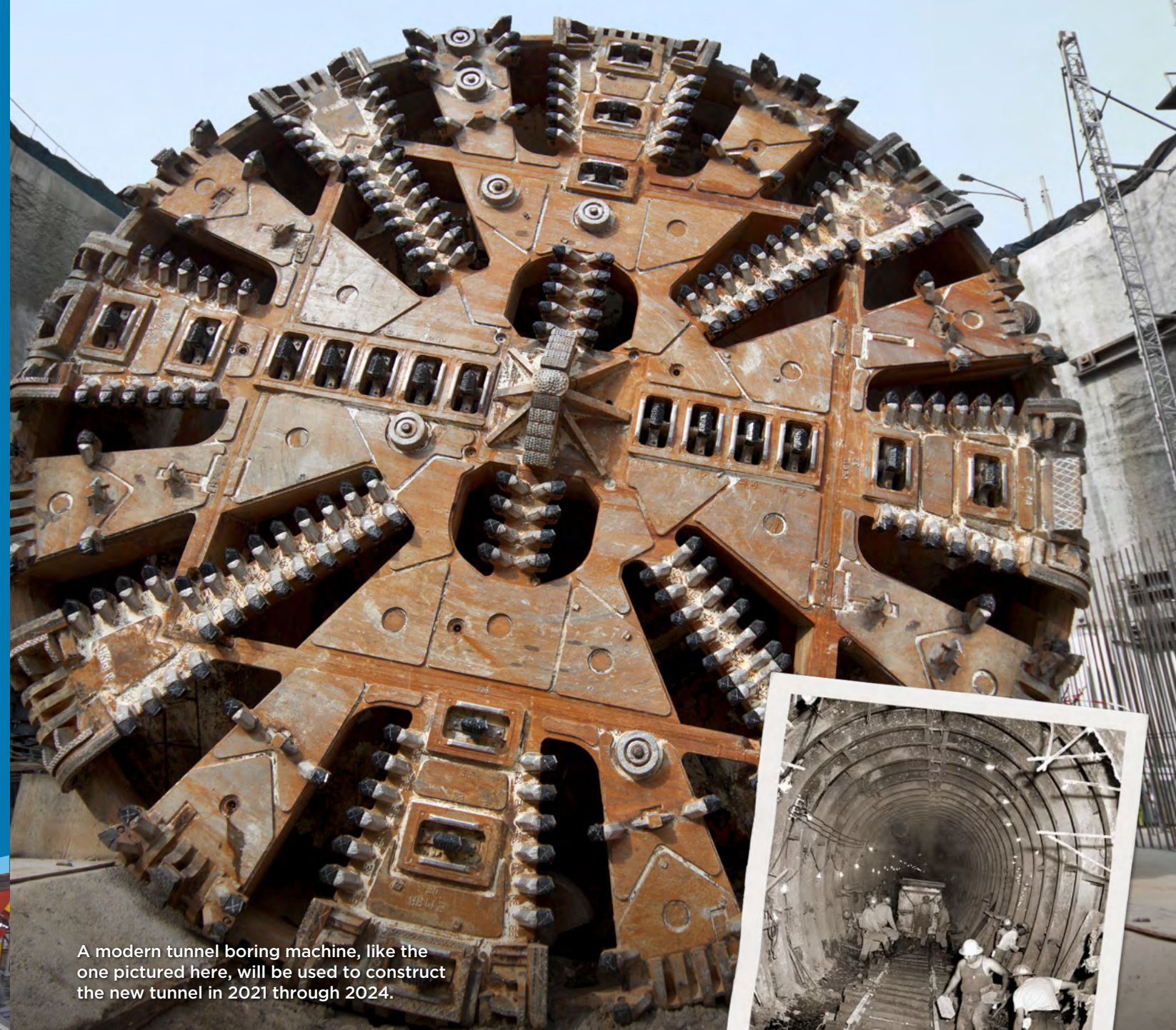
We are committed to ethical standards and accountability in our work

LEADERSHIP

We are committed to the advancement of excellence in wastewater and solid waste management

SERVICE

We are committed to reliable, responsive, and courteous service



A modern tunnel boring machine, like the one pictured here, will be used to construct the new tunnel in 2021 through 2024.



The Clearwater Project: Protecting Local Waterways by Addressing Aging Infrastructure

After several years of planning and public outreach, the Sanitation Districts' Board of Directors approved the Clearwater Project to address the reliability of our largest treatment plant, the Joint Water Pollution Control Plant. Under the Clearwater Project, a new 7-mile long tunnel is being built from the plant in Carson to existing ocean outfalls located at Royal Palms Beach in San Pedro. This project will allow us to safely discharge cleaned water to the ocean. A modern tunnel boring machine will be used to build the new tunnel, which will have an internal diameter of 18 feet. The new tunnel will replace the existing 8- and 12-foot diameter tunnels, which are over 60 and 80 years old, respectively.

FRONT COVER: View from JWPCP looking towards the Pacific Ocean and Catalina Island.

BACK COVER: The Joint Disposal Plant, circa 1928. In the inset photo, Chief Engineer A.K. Warren (2nd from left) leads a crew to inspect tunnel construction at Royal Palms Beach in San Pedro.

A MESSAGE FROM OUR CHIEF ENGINEER

Striving for Improvement

Infrastructure ages. Technology changes. Regulations become more stringent. To adapt and best serve the public, the Sanitation Districts are committed to continual improvement. The projects and initiatives profiled in this report demonstrate the agency's commitment.

Addressing Aging Infrastructure

A key part of our infrastructure is two tunnels that carry treated water six miles from our largest treatment plant to the ocean. These tunnels are over 60 and 80 years old and cannot be removed from service for inspection or repair. In 2019, we began construction of the Clearwater Project to protect local waterways by addressing this aging infrastructure.

Innovative Sewer Maintenance and Rehabilitation

Our sewer system spans 1,400 miles—equivalent to half the width of the United States—and consists of pipes of varying ages. We have developed an extensive program to inspect, maintain and rehabilitate this important infrastructure. Most of our sewer rehabilitation is done using newer, “trenchless” technology. This technology is faster, less costly and less impactful than traditional open-trench construction.

Continuing to Help Communities with Their Drinking Water Needs

For almost 60 years, the Sanitation Districts have been leaders in water recycling and helping our communities meet their water needs. Most of the cleaned water from 10 of our 11 wastewater treatment plants is beneficially reused. Recycling the water from our largest treatment plant is a challenge due to high salt levels that necessitate advanced treatment to make the water reusable. Recent advances in treatment technology now make such treatment more cost effective. The Sanitation Districts have partnered with the Metropolitan Water District of Southern California on a project that could purify and reuse much of the water from that plant.

Harnessing New Recycling Technology

The recent China ban on importation of all but the purest recycled materials has upset recycling programs nationwide. Recognizing the need for purer recyclables and more automation to remain cost competitive, we recently installed state-of-the-art sorting equipment at our largest materials recovery facility.

Developing Our Staff

Much of our work requires technical knowledge. To be our best, we must continually grow our skills and keep abreast of new developments. In 2019, all staff was provided access to a vast library of online training. Staff is also encouraged to participate in conferences related to their area of expertise and be active in industry organizations.

Since our formation in 1923, we have been committed to providing excellent public service. Continual improvement is a key to upholding that commitment.

Sincerely,



Robert C. Ferrante
Chief Engineer & General Manager



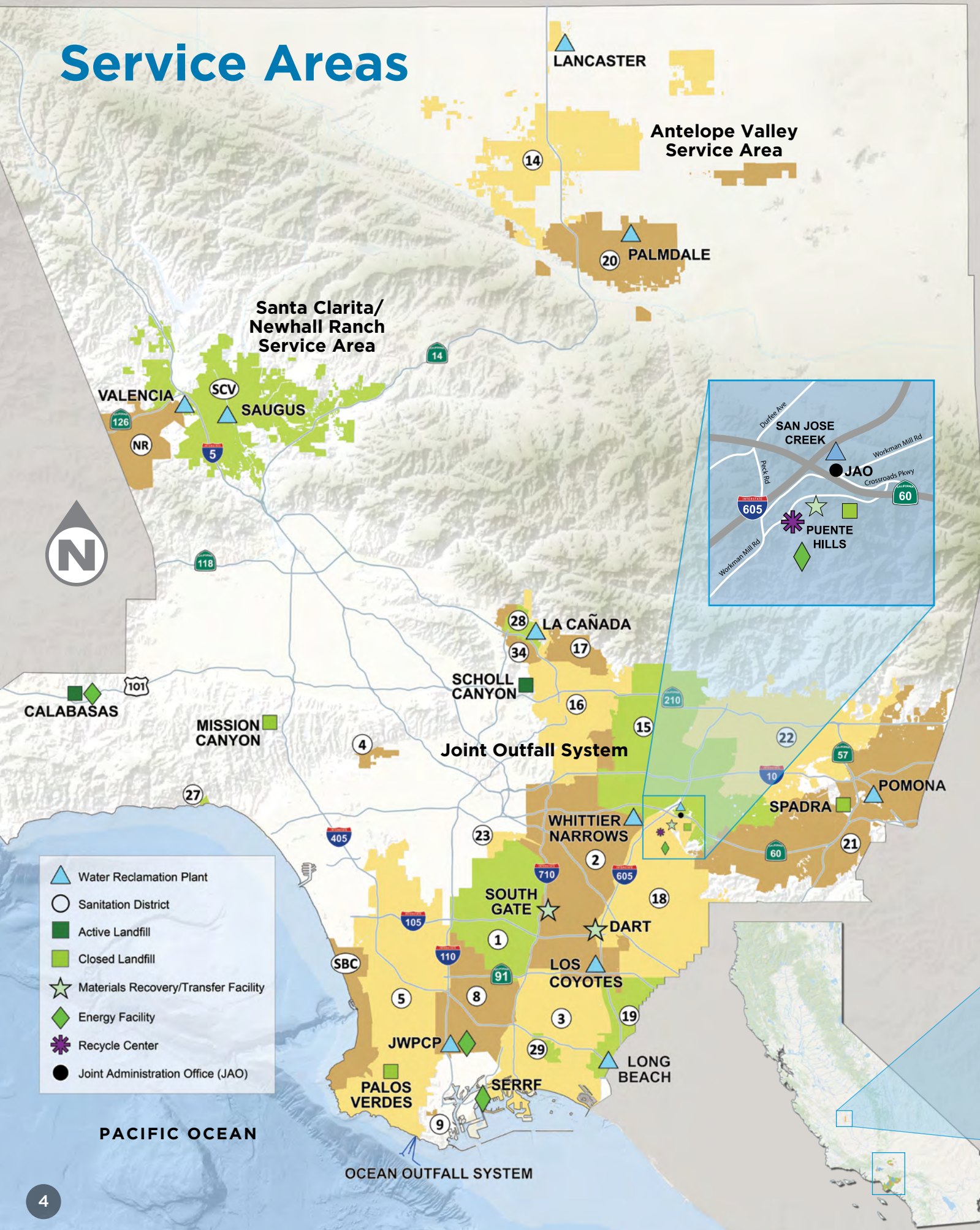
Boards of Directors (as of printing, March 20, 2020*)

Alhambra DIST. 2, 16	Ross J. Maza; <i>David Mejia</i>	Lynwood DIST. 1	Aide Castro; <i>Jose Luis Solache</i>
Arcadia DIST. 15, 22	April Verlato; <i>Roger Chandler</i>	Manhattan Beach DIST. 5, SBC	Nancy Hersman; <i>Richard Montgomery</i>
Artesia DIST. 2, 18, 19	Ali Sajjad Taj; <i>Rene J. Trevino</i>	Maywood DIST. 1	Eddie de la Riva; <i>Ramon Medina</i>
Azusa DIST. 22	Joseph R. Rocha; <i>Edward J. Alvarez</i>	Monrovia DIST. 15, 22	Tom Adams; <i>Becky A. Shevlin</i>
Baldwin Park DIST. 15, 22	Manuel Lozano; <i>Monica Garcia</i>	Montebello DIST. 2, 15	Salvador Melendez
Bell DIST. 1, 2	Ali Saleh; <i>Nestor Valencia</i>	Monterey Park DIST. 2, 15	Hans Liang; <i>Mitchell Ing</i>
Bell Gardens DIST. 2	Alejandra Cortez; <i>Marco Barcena</i>	Norwalk DIST. 2, 18	Margarita Rios; <i>Luigi Vernola</i>
Bellflower DIST. 2, 3, 18	Juan Garza; <i>Dan Koops (2, 18)</i> <i>Sonny Santa Ines (3)</i>	Palmdale DIST. 14 DIST. 20 (2nd DIR)	Steven Hofbauer; <i>Austin Bishop</i> Richard J. Loa; <i>Austin Bishop</i>
Beverly Hills DIST. 4	John Mirisch; <i>Robert “Bob” Wunderlich</i>	Palos Verdes Estates DIST. 5, SBC	David McGowan; <i>Michael Kemps</i>
Bradbury DIST. 15, 22	Richard T. Hale; <i>Richard Barakat</i>	Paramount DIST. 1, 2	Tom Hansen; <i>Daryl Hofmeyer</i>
Carson DIST. 8	Albert Robles; <i>Cedric Hicks</i>	Pasadena DIST. 15, 16, 17	Terry Tornek
Cerritos DIST. 2, 3, 18, 19	Naresh Solanki; <i>Jim Edwards</i>	Pico Rivera DIST. 2, 18	Gustavo Camacho; <i>Raul Elias</i>
Claremont DIST. 21	Larry Schroeder; <i>Jennifer Stark</i>	Pomona DIST. 21	Tim Sandoval; <i>GINNA ESCOBAR</i>
City of Commerce DIST. 2	John Soria; <i>Ivan Altamirano</i>	Rancho Palos Verdes DIST. 5, SBC	John Cruikshank <i>David Bradley</i>
Compton DIST. 1, 2, 8	Aja Brown; <i>Michelle Chambers</i>	Redondo Beach DIST. 5, SBC	Bill Brand; <i>Todd Loewenstein</i>
Covina DIST. 22	John C. King; <i>Victor Linares</i>	Rolling Hills DIST. 5	Leah Mirsch; <i>Patrick Wilson</i>
Cudahy DIST. 1	Elizabeth Alcantar; <i>Jose R. Gonzalez</i>	Rolling Hills Estates DIST. 5, SBC	Velveth Schmitz <i>Steve Zuckerman</i>
Culver City DIST. 5	Meghan Sahli-Wells; <i>Daniel Lee</i>	Rosemead DIST. 15	Margaret Clark; <i>Sandra Armenta Lopez</i>
Diamond Bar DIST. 21	Steve Tye; <i>Nancy Lyons</i>	San Dimas DIST. 21, 22	Curtis W. Morris; <i>Denis Bertone</i>
Downey DIST. 2, 18	Blanca Pacheco; <i>Claudia Frometa</i>	San Gabriel DIST. 2, 15	Jason Pu; <i>Juli Costanzo</i>
Duarte DIST. 15, 22	Samuel Kang; <i>Margaret Finlay</i>	San Marino DIST. 15, 16	Gretchen Shepherd Romey; <i>Ken Ude</i>
El Monte DIST. 15	Andre Quintero; <i>Victoria Martinez</i>	Santa Clarita SCV SCV (2nd DIR)	Cameron Smyth; <i>Marsha McLean</i> Laurene Weste
El Segundo DIST. 5, SBC	Drew Boyles; <i>Chris Pimentel</i>	Santa Fe Springs DIST. 18	William K. Rounds
Gardena DIST. 5	Tasha Cerda; <i>Dan Medina</i>	Sierra Madre DIST. 15	John Harabedian; <i>John Capoccia</i>
Glendora DIST. 22	Judy M. Nelson; <i>Michael Allowos</i>	Signal Hill DIST. 3, 29 DIST. 29	Lori Y. Woods; <i>Robert D. Copeland</i> Robert D. Copeland; <i>Keir Jones</i> Edward H.J. Wilson; <i>Tina Hansen</i>
Hawaiian Gardens DIST. 19	Jesse Alvarado; <i>Luis Roa</i>	South El Monte DIST. 15	Gloria Olmos; <i>Richard Angel</i>
Hawthorne DIST. 5	Alex Vargas; <i>Alex Monteiro</i>	South Gate DIST. 1, 2	Maria Belen Bernal; <i>Maria Davila</i>
Hermosa Beach SBC	Mary Campbell; <i>Justin Massey</i>	South Pasadena DIST. 16	Robert S. Joe
Huntington Park DIST. 1	Karin Macias; <i>Manuel “Manny” Avila</i>	Temple City DIST. 15	Nanette Fish; <i>Cynthia Sternquist</i>
City of Industry DIST. 15, 18, 21	Cory Moss	Torrance DIST. 5, SBC	Patrick J. Furey; <i>Geoff Rizzo</i>
Inglewood DIST. 5	James T. Butts	Vernon DIST. 1, 2, 23 DIST. 1 DIST. 2 DIST. 23	Melissa Ybarra; <i>William J Davis</i> <i>William J Davis</i> Carol Menke; <i>Leticia Lopez</i> William J. Davis; <i>Diana Morales Gonzales</i>
Irwindale DIST. 15, 22	Albert F. Ambriz; <i>Mark A. Breceda</i>	Walnut DIST. 21, 22	Andrew Rodriguez; <i>Eric Ching</i>
La Cañada Flintridge DIST. 28, 34	Michael A. Davitt Jonathan C. Curtis; <i>Teresa “Terry” Walker</i> Greg C. Brown; <i>Leonard Pieroni</i>	West Covina DIST. 15, 21, 22	Tony Wu
La Habra Heights DIST. 18	Brian Bergman; <i>Dennis Laherty</i>	West Hollywood DIST. 4	John D’Amico; <i>Lindsey P. Horvath</i>
La Mirada DIST. 18	Steve De Ruse	Whittier DIST. 2, 15, 18	Joe Vinatieri; <i>Cathy Warner</i>
La Puente DIST. 15, 21	Charlie Klinakis; <i>Dan Holloway</i>		
La Verne DIST. 21, 22	Don A. Kendrick; <i>Charlie A. Rosales</i>		
Lakewood DIST. 3, 19	Todd Rogers; <i>Jeff Wood</i>		
Lancaster DIST. 14	R. Rex Parris; <i>Marvin Crist</i>		
Lawndale DIST. 5	Robert Pullen-Miles; <i>Pat Kearney</i>		
Lomita DIST. 5	James Gazeley		
Long Beach DIST. 1, 2, 3, 8, 19	Robert Garcia; <i>Dee Andrews</i>		
Los Angeles City DIST. 1, 2, 3, 4, 5, 8, 9, 16	Nury Martinez; <i>Joe Buscaino</i>		
Los Angeles County (unincorporated) DIST. 1, 2, 3, 8, 9, 14, 15, 16, 17, 18, 19, 20, 21, 22, SCV	Kathryn Barger; <i>Sheila Kuehl</i> Kathryn Barger; <i>Janice Hahn</i> <i>Hilda Solis</i> ; <i>Mark Ridley-Thomas</i> Sheila Kuehl; <i>Hilda Solis</i>		

*Directors and alternates are subject to change throughout the year.

Alternate Directors in *italics*

Service Areas



Who We Are

The Sanitation Districts consist of 24 independent special districts serving about 5.6 million people in Los Angeles County. The service area in the map to the left covers approximately 850 square miles and encompasses 78 cities and unincorporated areas in the county.

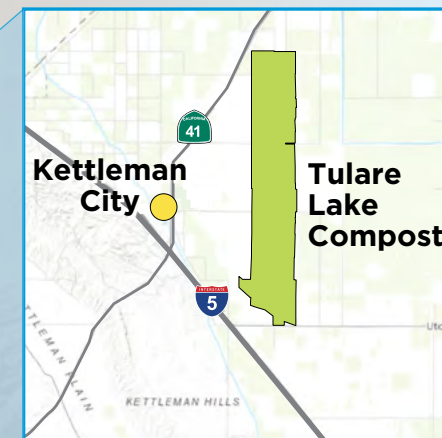
The Sanitation Districts were created in 1923 to construct, operate, and maintain facilities that collect, treat, and dispose of domestic and industrial wastewater. The Sanitation Districts operate and maintain the larger, regional wastewater collection systems, while cities and unincorporated areas within each

SERVING
5.6 million people
850 square miles
78 cities

District are responsible for their smaller local collection systems. In the 1950s, the Sanitation Districts were given responsibility for solid waste management (excluding trash pickup).

To maximize efficiency and reduce costs, the 24 Districts work cooperatively with one administrative staff headquartered near the City of Whittier. Each District has a Board of Directors consisting of the mayor of each city served, and the Chair of the County Board of Supervisors for unincorporated territory. Each District pays its proportionate share of administrative costs.

Overall wastewater and solid waste management spending for 2018-19 was \$526 million and \$187 million, respectively. Both systems provide essential public services at some of the most competitive service rates in the country.



FULL-TIME EMPLOYEES

1,672

AVERAGE YEARS OF SERVICE AT RETIREMENT

29

AVERAGE AGE

46

2019 NEW HIRES

115

2019 RETIREMENTS

72

LICENSED ENGINEERS

239

EMPLOYEES WITH ADVANCED DEGREE

259

EMPLOYEES WITH SPECIAL CERTIFICATIONS

198

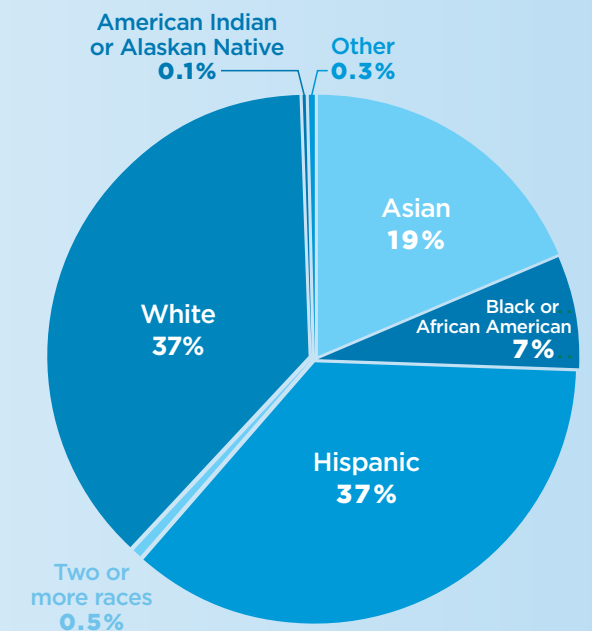
STAFFING BY GENDER

WOMEN

22%

MEN

78%



Numbers as of Dec. 31, 2019

What We Do

WASTEWATER

We collect, treat and recycle the wastewater (sewage) from 5.6 million people in Los Angeles County. Our wastewater system currently treats about 390 million gallons per day, enough to fill the Rose Bowl nearly five times a day. This system includes 11 wastewater treatment plants, 48 pump stations, over 1,400 miles of sewer, and two state-of-the-art composting facilities for managing the solids removed during treatment.



1,000,000,000,000
Over 1 trillion gallons of water recycled since 1962

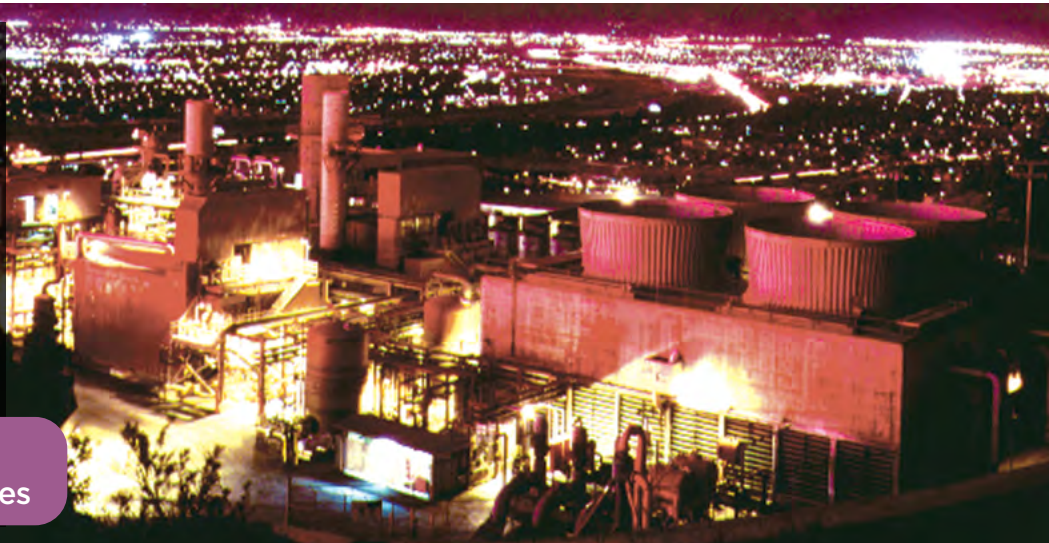
SOLID WASTE

Our solid waste management system accommodates about one quarter of the county's solid waste. We manage the waste hauled to us with a system that includes two active landfills, three materials recovery/transfer facilities, and a recycle center. We also have infrastructure for a waste-by-rail system to handle the county's waste in the future when local disposal options are exhausted.



GREEN ENERGY

The Sanitation Districts are one of the country's leading producers of green energy. Some of the electricity is used in powering Sanitation Districts' operations; the rest is exported to the local grid, which reduces the power that utilities must produce and thereby reduces greenhouse gas emissions.



78 Megawatts produced:
Enough for 78,000 homes

Our Organization

CHIEF ENGINEER & GENERAL MANAGER

Robert C. Ferrante

ASSISTANT CHIEF ENGINEER & ASSISTANT GENERAL MANAGER

Charles E. Boehmke

DEPARTMENTS & SECTIONS

ENGINEERING	FACILITIES PLANNING	FINANCIAL MANAGEMENT	HUMAN RESOURCES	SOLID WASTE MANAGEMENT	TECHNICAL SERVICES	WASTEWATER MANAGEMENT
Construction Management	Information Services	Accounting	Employee Benefits	Energy Recovery	Air Quality	Industrial Waste
Electrical & Instrumentation Design	Information Technology	Budget & Finance	Employment Services	Fleet Management	Environmental Health & Safety	Joint Water Pollution Control Plant
Sewer Design	Planning & Property Management	Purchasing	Payroll	Solid Waste Operations & Engineering	Laboratories	Wastewater Collection Systems
Structural, Architectural & Geotechnical Design	Wastewater Planning				Reuse & Compliance	Water Reclamation Plants
Wastewater & Solid Waste Design					Wastewater Research	
					Water Quality	

ENGINEERING

Design and construction oversight of Sanitation Districts' facilities

FACILITIES PLANNING

Long-range planning, environmental review, environmental permitting, property management, information technology, public relations, security, facilities management, and document management

FINANCIAL MANAGEMENT

Budgeting, accounting, purchasing, revenue collection, and insurance

HUMAN RESOURCES

Hiring employees, payroll, benefits, and compliance with state and federal employment laws

SOLID WASTE MANAGEMENT

Operation and maintenance of the solid waste management facilities and energy recovery facilities

TECHNICAL SERVICES

Water recycling, biosolids management, water and air permit compliance, research, environmental health and safety, laboratory processes, regulatory advocacy, and legislative advocacy

WASTEWATER MANAGEMENT

Operation and maintenance of wastewater management facilities and regulating industrial discharges to the Sanitation Districts' sewer system

Maintaining Infrastructure for a Longer Life

ACCOMPLISHMENTS & MILESTONES

The Puente Hills Landfill Gas-to-Energy Facility (PERG) generates 26 megawatts of electricity using gas produced by the adjacent Puente Hills Landfill. This electricity is sold to the Southern California Public Power Authority and is enough to power 26,000 Southern California homes.

PERG has been operating since January 1987 and has remained online 95% of that time. The keys to this reliability are routine preventative maintenance, which occurs every 18 months, and a major overhaul of its steam turbine and generators, which occurs every 10 years. During an outage, landfill gas is destroyed using flares, which protects the environment but does not generate any revenue. Thus, minimizing these outages is critical to a cost-effective operation. Our most recent major overhaul was completed in 2019. During this effort, extensive equipment damage was uncovered. Sanitation Districts' staff worked with the contractor to minimize delays and, ultimately, we have a safer system that will produce revenue for more years.

Reducing Emissions With a New Composting Process

The Sanitation Districts developed the Tulare Lake Compost facility (TLC) in the Central Valley near Kettleman City. The facility combines agricultural and green waste from local farms with biosolids (the nutrient-rich solids removed during wastewater treatment) to produce exceptional-quality compost. This compost is used like fertilizer and applied to nearby farmland to improve crop yields and soil quality.

TLC helps improve nearby air quality by providing an alternative to open field burning of agricultural waste. The original composting system had difficulty meeting air emission requirements during extreme weather. Staff experimented with an innovative composting system that meets requirements in all weather and has been approved by local regulators. This development garnered the Superior Achievement Award by the American Academy of Environmental Engineers and Scientists (AAEES).

Tulare Lake Composting Facility

Using New Technologies to Rehabilitate Sewers

The Sanitation Districts have a large sewer system consisting of 1,400 miles of sewer of various ages. A critical program for the agency is to periodically assess the condition of these sewers and address aging infrastructure.

To rehabilitate deteriorated sewers in a cost-effective and minimally disruptive way, the Sanitation Districts utilize a variety of trenchless technologies like sliplining and cured-in-place pipe (CIPP). In 2019, the agency completed a sliplining rehabilitation of a 12-foot diameter sewer that was nearly three miles long. The Sanitation Districts were recognized for this effort with the Rehabilitation Project of the Year by the publication *Trenchless Technology*.

Over the past 30 years, the Sanitation Districts have rehabilitated approximately 127 miles of deteriorated sewer.

A 126-inch slipliner being installed

Recovering from the Woolsey Fire

The Woolsey Fire was one of the most destructive fires in Southern California's history, burning approximately 100,000 acres and 1,600 structures.

On Friday, November 9, 2018, the fire burned almost half of the 491-acre Calabasas Landfill. Due to staff's incredible hard work and determination, the landfill reopened for business as soon as the nearby freeway was reopened. The site sustained significant damage to infrastructure, including the loss of over 4 miles of piping, the site office building, electrical and communication systems, and storm drains.

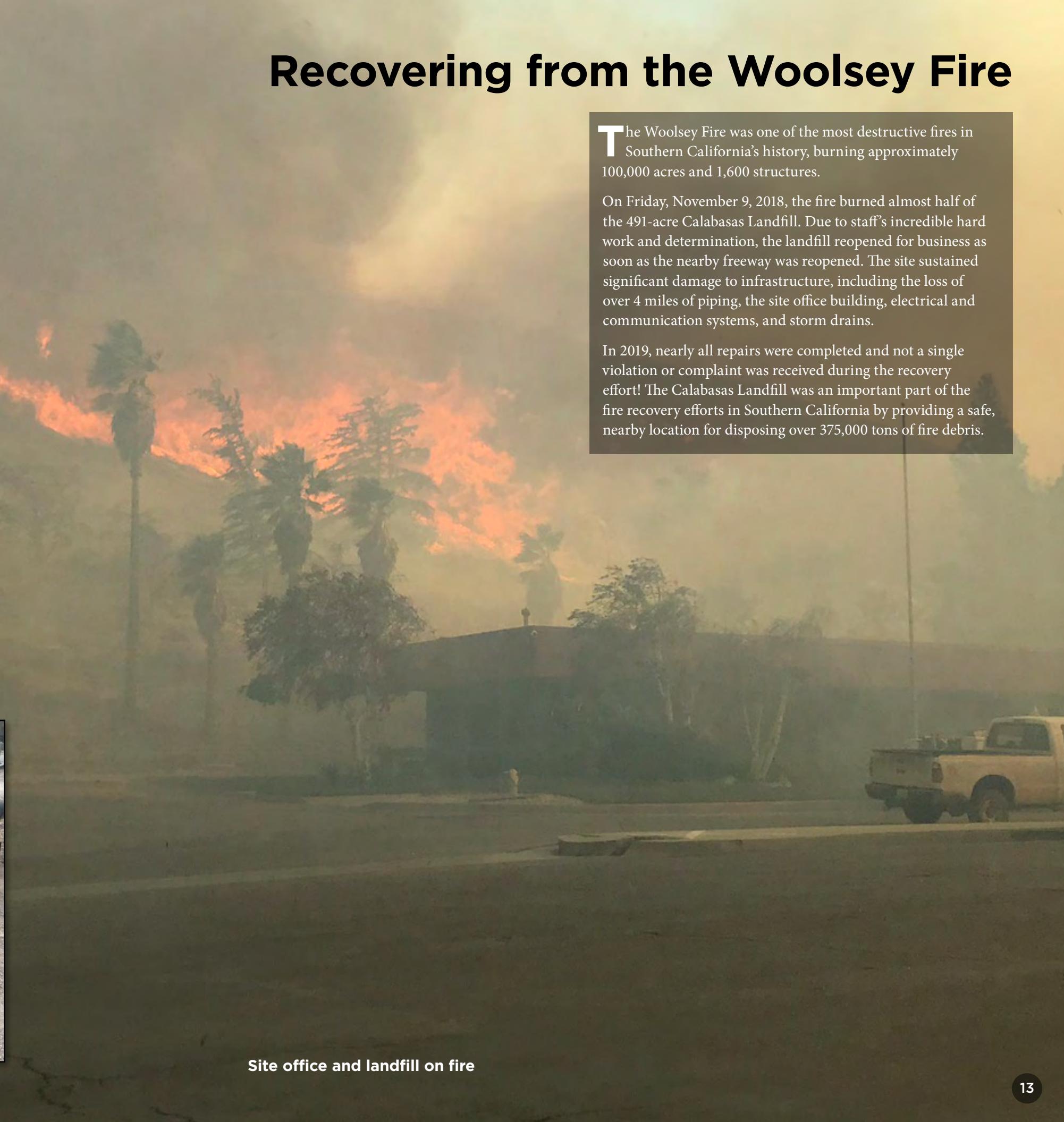
In 2019, nearly all repairs were completed and not a single violation or complaint was received during the recovery effort! The Calabasas Landfill was an important part of the fire recovery efforts in Southern California by providing a safe, nearby location for disposing over 375,000 tons of fire debris.



Damage to the site office



Damage to piping



Site office and landfill on fire

FUTURE CHALLENGES

Making Progress Towards a Regional Recycled Water Program

The Sanitation Districts and the Metropolitan Water District of Southern California continue their partnership towards what could become the largest water recycling project in the country.

In 2019, a demonstration-scale water purification facility at the Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) began operations. This Advanced Purification Center purifies 500,000 gallons of the cleaned water from the JWPCP every day. A range of tests will be completed to ensure that the water meets stringent requirements and generate information needed for design and permitting of a potential full-scale facility. At full scale, the project could produce 150 million gallons of purified water per day, which is enough to serve more than 500,000 homes. That water would be delivered through 60 miles of pipes to the region's groundwater basins, eventually be pumped up and used again.

Grand opening of the Advanced Purification Center

Adapting to Recycling Market Changes



In response to changes in the recycling market, the Sanitation Districts invested in state-of-the-art, automated recycling equipment at the Puente Hills Materials Recovery Facility. This new equipment is designed to meet stringent purity standards for recycled materials while processing recyclables four times faster than the original equipment. The new sort line uses optics, screens, and artificial intelligence to sort recycled materials.

The new sort line will improve the economics of recycling and assist the Sanitation Districts' member cities in achieving state-mandated recycling goals.

The new sorting line at the Puente Hills Materials Recovery Facility

Converting Food Waste into Green Energy



The Sanitation Districts have developed an important program to recycle food waste into green energy. This program diverts organic waste from landfills and helps the Sanitation Districts' member cities meet state organic waste recycling requirements.

Slurried (liquefied) food waste is delivered to the Joint Water Pollution Control Plant (JWPCP) in Carson and converted into biogas in anaerobic digesters. In 2019, the program grew to accept 300 tons of slurried food waste per day. This biogas can be converted into renewable natural gas, equivalent to 1,500 gallons of gasoline per day.

In 2020, a new receiving station and biogas treatment facility will enable up to 550 tons of food waste per day to be accepted and enable biogas to be converted into renewable natural gas and served as vehicle fuel at the nearby fueling station. As more jurisdictions and businesses implement food waste recycling in response to state mandates, the demand for this program is expected to increase.

Machine to liquefy food waste

Protecting Local Waterways

In 2019, construction on the Clearwater Project began at the Joint Water Pollution Control Plant in Carson. This project will build a new tunnel to safely discharge the plant's cleaned water to the ocean. An access shaft is being built at the southwest corner of the plant, where visual/sound barriers have already been erected. This shaft will be used to lower the tunnel boring machine to its starting depth and remove all tunneling spoils. The shaft will also be the entry point for construction materials like the pre-fabricated tunnel wall sections.

Construction of the shaft should be completed by March 2021, with tunneling beginning thereafter. Construction is scheduled to be complete in 2026.

Rebar being lowered into the ground to support excavation of the tunnel access shaft



Helping Our Cities with Stormwater Compliance



In 2016, the Sanitation Districts gained authority to help cities manage their stormwater. Our first large project under this authority is the Carriage Crest Stormwater Project where the Sanitation Districts acted as a consultant for the City of Carson, including overseeing design and construction of the project. Construction of the project began in late 2018 and is expected to wrap up in Fall 2020.

The Sanitation Districts continue to work with cities to develop other stormwater improvements including diversion of dry-weather and stored wet-weather flows from storm drains to our sewer system. We are also actively involved on countywide committees to help determine where funds from the Safe, Clean Water Program would be best directed to protect the region's waterways.

Below-ground storage being installed at Carriage Crest Park in 2019

Connecting With Our Community

Community engagement has long been a key to achieving the Sanitation Districts' mission. These efforts allow us to tell you about what we do and the challenges we face. Community engagement also provides us an opportunity to listen to you so that we can better serve you.



STUDENTS PARTICIPATING IN SEWER SCIENCE
6,000



17 TOURS OF BIXBY MARSHLAND

PRESENTATIONS AT COMMUNITY MEETINGS
46



14 COMMUNITY MEETINGS HOSTED

ACTIVE ENGAGEMENT THROUGH SOCIAL MEDIA

PARTICIPATED IN **20** COMMUNITY EVENTS



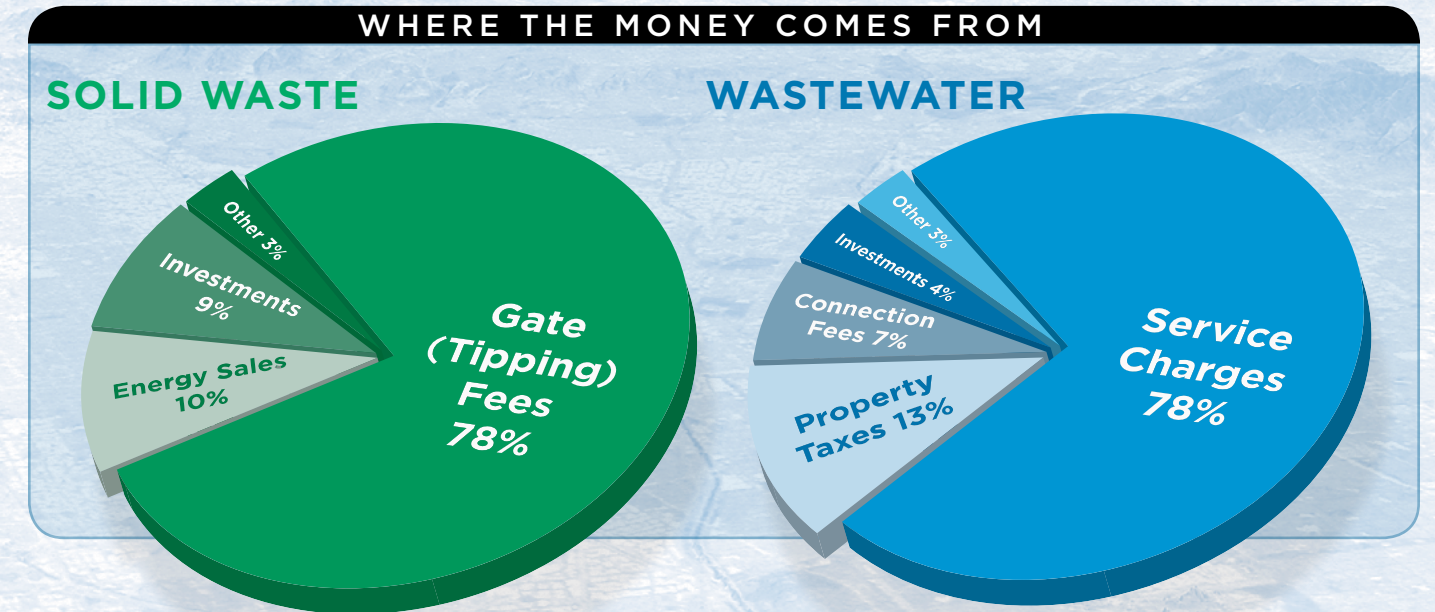
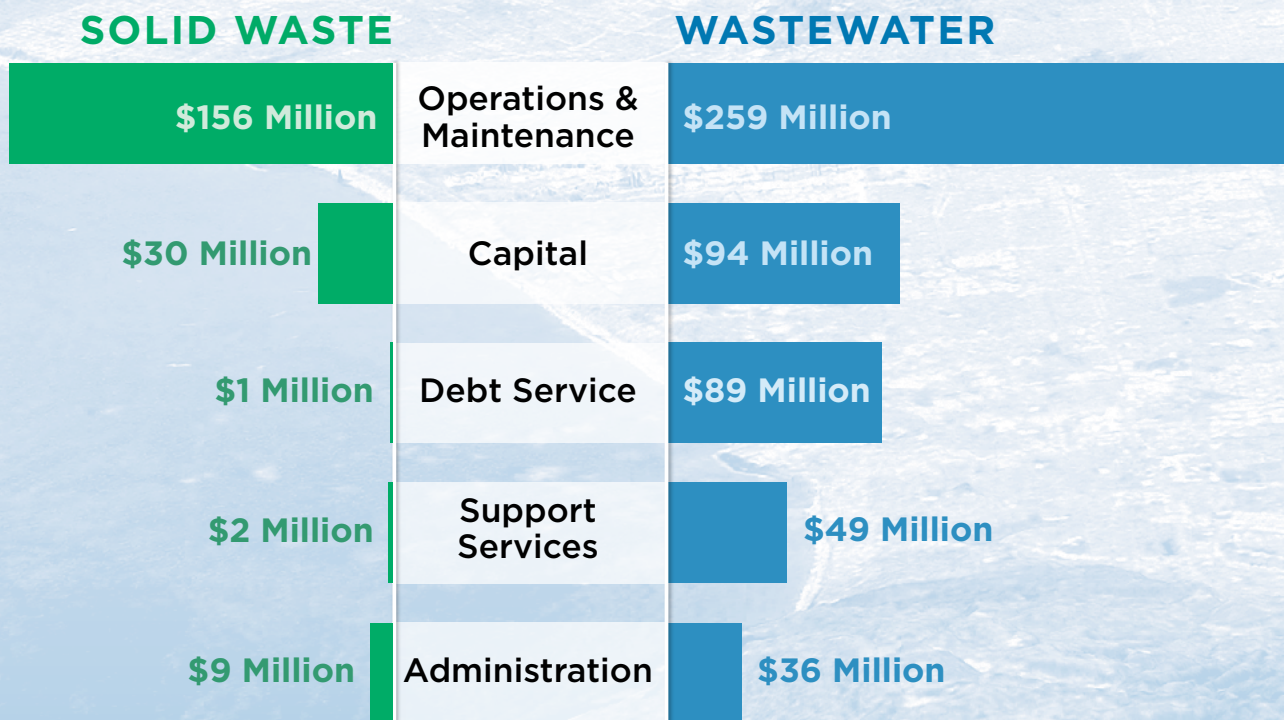
TOURS OF OUR FACILITIES
137

HOSTED OVER **2,000** COMMUNITY MEMBERS AT OUR **13TH ANNUAL EARTH DAY CELEBRATION**



The Financial Landscape

Actual Spending in Fiscal Year 2018-19



Awards & Achievements



It Takes a Team

Serving the public and protecting the environment requires a diverse team of committed, hard-working, and skilled professionals.

Our team includes mechanics, engineers, maintenance and construction workers, treatment plant operators, scientists, equipment operators, IT professionals, grounds maintenance workers, electricians, administrative professionals, and others.

To join our team, visit governmentjobs.com/careers/LACSD.



UTILITY OF THE FUTURE

Water Environment Federation



RESEARCH ACHIEVEMENT

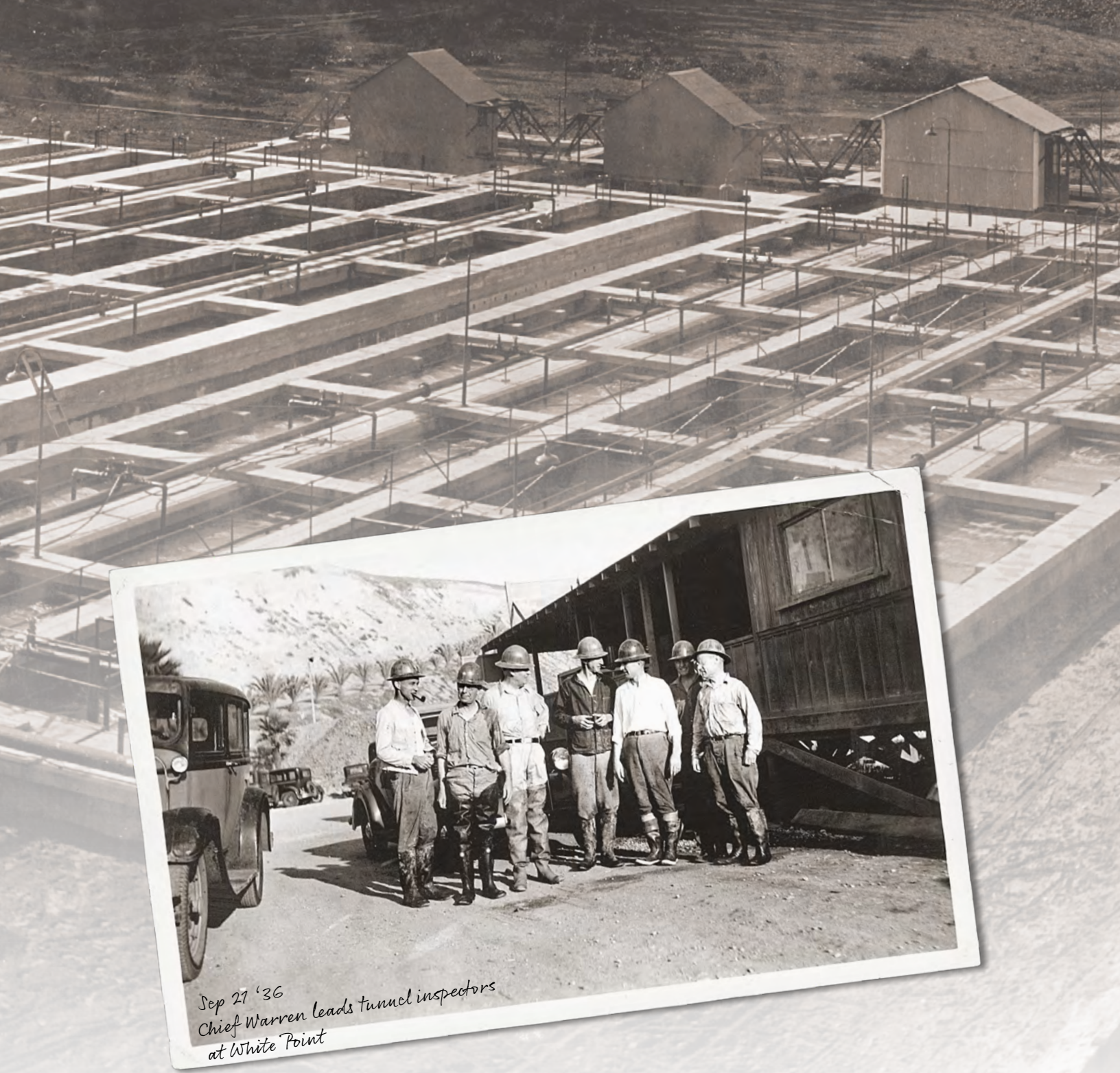
California Water Environment Association
Los Angeles Basin Section
Pilot-Scale Evaluation of ANITA Mox for Concurrent Mainstream Deammonification and Phosphorous Removal



PLANT OF THE YEAR Lancaster WRP

Medium (≤ 5 MGD and ≥ 20 MGD)
California Water Environment Association
Los Angeles Basin Section






Sep 27 '36
Chief Warren leads tunnel inspectors
at White Point




**LOS ANGELES COUNTY
SANITATION DISTRICTS**

Converting Waste Into Resources

 SanDistricts  SanitationDistrictsLACounty  SanDistricts

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