

# ESD 2019 Annual Report

**San José Environmental Services Department**  
Delivering world-class utility services and programs to improve  
our health, environment and economy.



**Kerrie Romanow**  
Director

*2018 Oracle Chief  
Sustainability Officer  
of the Year*

# MESSAGE FROM THE DIRECTOR

ESD provides an array of world-class services and programs to protect public health and the environment, including garbage and recycling, drinking water and recycled water. We keep trash and toxins out of our sanitary sewers and waterways. We also operate and maintain the San José-Santa Clara Regional Wastewater Facility and oversee a \$2.1 billion, 30-year [Capital Improvement Program](#) to upgrade it. The wastewater facility includes an award-winning laboratory that conducts more than 50,000 tests per year to ensure the quality of discharged water, protecting public health and San Francisco Bay.

Meanwhile, the threat of climate change grows more urgent every day, and the City of San José, along with community members and partners, is moving aggressively to reduce fossil fuel consumption and greenhouse gas emissions.



The 2018-19 fiscal year marked the first full year of implementation of our ambitious climate action plan, [Climate Smart San José](#), a communitywide initiative to reduce air pollution, save water and improve quality of life. It provides a roadmap to achieving the GHG reduction targets of the international [Paris Agreement](#).

We are making significant progress toward our Climate Smart goals. Our achievements in 2018-19 included forging important new partnerships with [Bloomberg Philanthropies](#) and other organizations, securing Council approval of [key programs](#), and earning special recognition of our sustainability initiatives.

You'll be hearing a lot more about Climate Smart this year as we continue to develop new programs and engage with the entire community about reducing our carbon footprint.

None of this would be possible without the help of our many partners, from other City departments to stakeholders and residents. I owe a special thank you to the wonderful staff of ESD, who epitomize public service. Their creativity and passion inspire me every day. I'm lucky to lead such an incredible group of people who are committed to improving San José and the world.

- Kerrie





**Napp Fukuda**  
Assistant Director

## MESSAGE FROM THE ASSISTANT DIRECTOR

It has been another busy and rewarding year for the more than 550 talented and dedicated employees of ESD.

We've continued to fulfill our mission of delivering world-class programs and services as well as advancing the City Manager's Enterprise Priorities, which provide strategic direction for City departments in eight key areas, including infrastructure, emergency preparedness and human resources.

We've made incredible progress on the \$1.4 billion, 10-year phase of our Capital Improvement Program at our Regional Wastewater Facility, where there are currently more than \$200 million worth of projects in design and construction. Every day, the CIP team displays teamwork, creativity and problem-solving in upgrading the largest advanced wastewater facility in the western United States.

ESD has also made strides in emergency preparedness, holding multiple drills and updating our action plans. Living in earthquake country, we must be ready and able to do our jobs when our community needs us most.

We've also stepped up our recruitment, particularly in the water and wastewater fields, since ESD's greatest strength is our skilled and passionate staff. Among the highlights: We added an [ESD Careers webpage](#) that features job openings, [video profiles](#) of staff members, and opportunities at ESD for training and development.

Meanwhile, our compliance team continues to ensure we abide by all regulations governing air and water quality, while our finance and budgeting staff make remarkable contributions to the City's annual budget process.

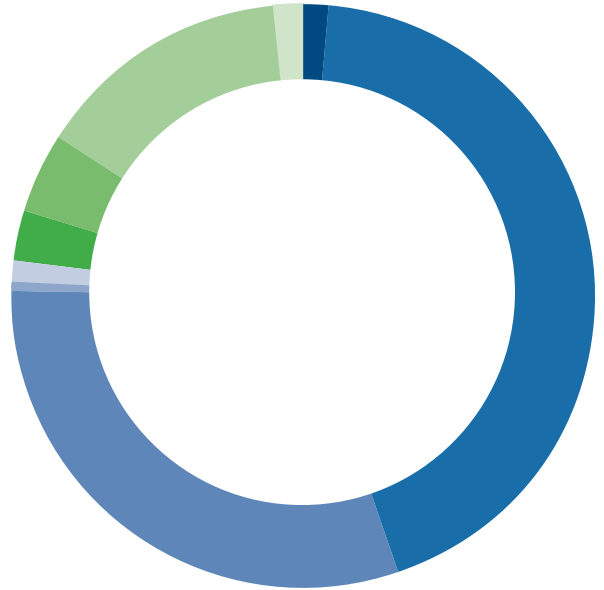
I'm proud of the work we've done and the incredible people who've done it. I know more great things lie ahead.

- Napp



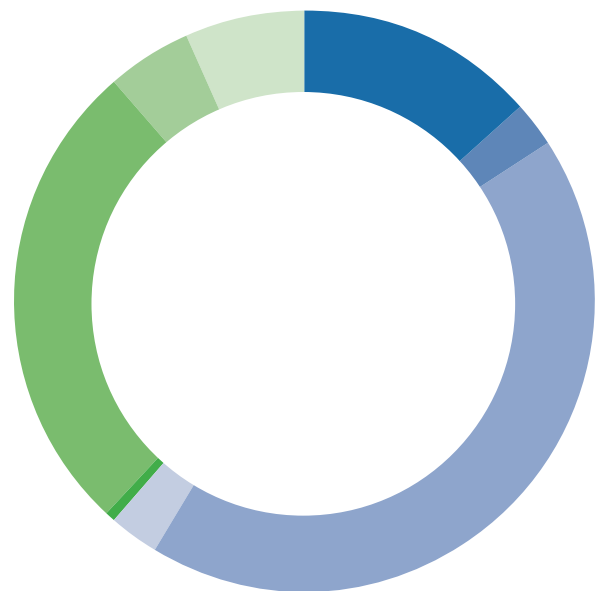
## Resources by Fund

General Fund	\$4,450,328
Integrated Waste Management	\$136,721,934
SJ/SC Regional Wastewater Facility	\$96,170,183
Sewage Plant Connect Fee	\$460,000
Sewer Service and Use Charge	\$4,660,087
South Bay Water Recycling Operating	\$8,956,473
Storm Sewer Operating	\$13,714,695
Water Utility	\$44,698,768
Capital Funds	\$4,870,600
<b>Total</b>	<b>\$314,703,068</b>



## Funding by Core Service

Potable Water Delivery	\$4,450,328
Recycled Water Management	\$136,721,934
Recycling and Garbage Services	\$96,170,183
Stormwater Management	\$9,011,264
Sustainability and Environmental Health	\$1,579,917
Wastewater Management	\$83,801,610
Strategic Support	\$14,843,564
Strategic Support - Other	\$20,986,750
<b>Total</b>	<b>\$314,703,068</b>





# CSSJ

[Climate Smart San José](#) is a bold initiative to reduce greenhouse gas emissions, save water and improve quality of life in San José.

Adopted by the City Council in 2018, Climate Smart is a communitywide effort that encourages all residents and businesses to use clean and renewable energy and improve energy and water efficiency.

Climate Smart commits San José to the greenhouse gas emission reduction goals of the international [Paris Agreement](#) and involves collaboration with many City departments, partners and stakeholders.

Our climate action plan is based on the idea that a more sustainable life is a better life: less time stuck in your car in traffic, more time walking or biking, more time with family and friends.



CSSJ Team



# 1 of 25

Selected by Bloomberg Philanthropies as one of 25 U.S. cities to participate in the [American Cities Climate Challenge](#), a two-year acceleration program to boost the implementation of Climate Smart.

## FY 2018-2019 Highlights

- Co-hosted successful conference, “Leading Climate Innovation: The Silicon Valley Way,” an affiliate event of the Global Climate Action Summit in San Francisco, with the Mayor’s Office and San José Clean Energy.
- Received City Council approval of the [Energy and Water Building Performance Ordinance](#), enabling the City to track and incentivize energy- and water-efficiency improvements in large buildings.
- Introduced the Carbon Free Living demonstration project, a mobile home equipped with Climate Smart energy features.



Became first city in California to earn LEED for Cities Platinum certification from the U.S. Green Building Council.

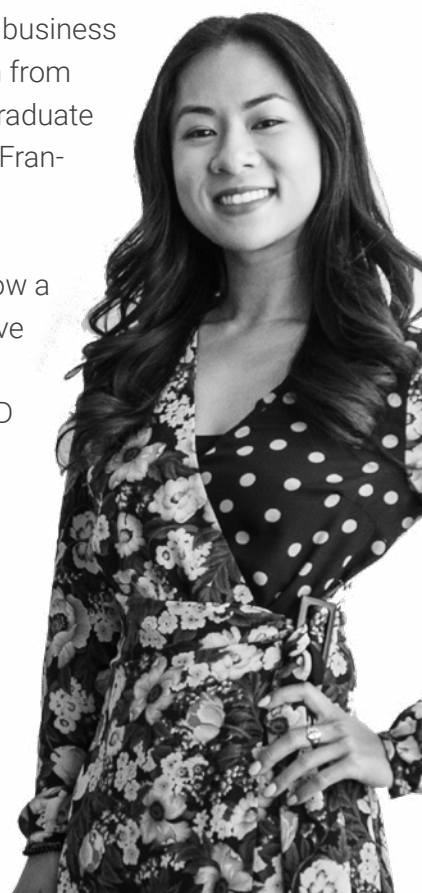
## Staff Spotlight: Leanna Huynh

Leanna Huynh is an associate environmental services specialist, implementing a suite of cutting-edge programs to promote clean energy and energy efficiency. Among the programs she leads are Electrify San José, which offers rebates to residents who switch from gas-powered water heaters to new electric heat pump water heaters, and ESD’s zero net carbon demonstration trailer.

*“It’s great to be in an environment where everyone’s really passionate about the work that they’re doing. We also have a fun time doing it.”*

### Fast Facts:

- Joined ESD in 2015 as a Climate Corps fellow
- Bachelor’s degree in environmental science from UCLA and a master’s degree in business administration from the Presidio Graduate School in San Francisco
- In high school, she helped grow a garden of native plants with a grant from ESD





# RWF

The [San José-Santa Clara Regional Wastewater Facility](#) is a critical utility that serves more than 1.4 million residents and 17,000 businesses in Silicon Valley.

The RWF is the [largest advanced wastewater facility](#) in the western United States, using a tertiary treatment process that protects public health and southern San Francisco Bay, which provides habitat for dozens of fish and bird species, from leopard sharks to bald eagles.

The wastewater facility was commissioned in 1956 and is now undergoing a \$2.1 billion [Capital Improvement Program](#) that will upgrade infrastructure, technology, reliability and efficiency over the course of 30 years.

The RWF serves eight cities and four sanitation districts:

- San José, Santa Clara and Milpitas
- Cupertino Sanitary District (Cupertino)
- West Valley Sanitation District (Campbell, Los Gatos, Monte Sereno and Saratoga)
- County Sanitation District No. 2-3 (unincorporated)
- Burbank Sanitary District (unincorporated)







# 109 M


Average number of gallons of wastewater treated every day at the RWF, which produces about 10 million gallons of recycled water per day.

## FY 2018-2019 Highlights

- Continued to operate without interruption amid a Capital Improvement Program that required 70 shutdowns of varying length and complexity.
- Eight RWF employees completed an operator-in-training program, earned a Grade II certificate and were promoted to operator.
- Provided operations and maintenance support to CIP projects and completed critical maintenance work, including repairs to the Pond A18 South Gate Structure and levees.
- Worked with UC Davis researchers to monitor southern San Francisco Bay and ensure the health of the diverse local ecosystem.



Maintained 100 percent compliance with all regulations governing wastewater treatment operations, effluent quality and biosolids management.



## Staff Spotlight: Jim Choyce

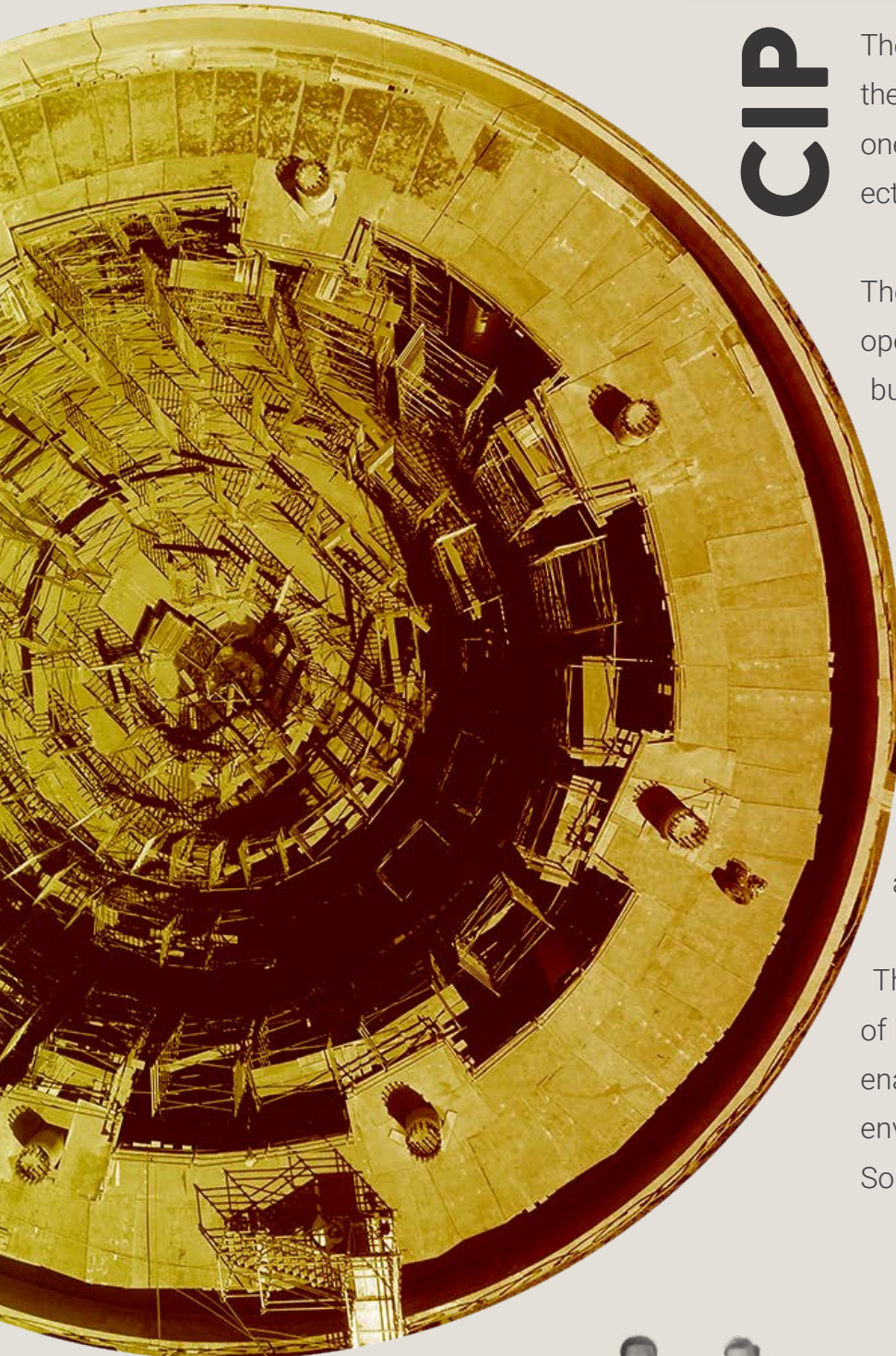
Jim Choyce is a senior wastewater mechanic, maintaining critical equipment that enables the RWF to operate 24 hours a day. His role includes collecting data, analyzing equipment, welding, replacing motors and pumps, and operating tractors and other heavy equipment. Jim and his team are essential to the RWF's nonstop operation throughout the Capital Improvement Program.

*"I like working with my hands and the rewarding feeling of repairing something yourself. Working at the Regional Wastewater Facility is satisfying because I spend most of my time outdoors and there's something new and different to accomplish every day."*

### Fast Facts:

- Born in San José
- Has a commercial Class A driver's license to operate vehicles that weigh more than 80,000 pounds
- Owns a small ranch where he raises cows, chickens and other livestock





# CIP

The [Capital Improvement Program](#) at the Regional Wastewater Facility is one of the largest public works projects in the history of the South Bay.

The CIP will not only improve the operation of the wastewater facility but also make it more resilient in the event of a major earthquake or other emergency.

The program began in 2014 and is now in the midst of a 10-year, \$1.4 billion design and construction effort to upgrade everything from liquids and solids treatment to power generation and computer systems.

This comprehensive improvement of infrastructure and technology will enable the RWF to protect the health, environment and economy of the South Bay for decades to come.



CIP Team



# \$45.9 M

**Amount of construction contract approved  
by the City Council for the Blower  
Improvements Project.**

## **FY 2018-2019 Highlights**

- Completed construction of four critical projects with a total value of roughly \$21.2 million:
  - Construction-Enabling Improvements
  - Headworks Critical Improvements
  - Iron Salt Feed Station
  - Plant Instrument Air System Upgrade
- Continued construction of the Digester and Thickener Facilities Upgrade, which is expected to be finalized in November 2020.
- Made substantial progress on the new [Cogeneration Facility](#), with completion anticipated in September 2020.
- Commenced or advanced design of five major projects:
  - Headworks
  - Nitrification Clarifiers Rehabilitation – Phase I
  - Filter Rehabilitation
  - HVAC Improvements
  - Facility Wide Water Systems Improvements



## **Staff Spotlight: Nora Cibrian**

Nora Cibrian is an environmental services program manager in charge of implementing a program to manage the estimated 122,000 wet tons per year of biosolids that will result from a new mechanical dewatering process at the Regional Wastewater Facility. Her responsibilities include procuring multiple contracts for the beneficial use of biosolids and tracking regulatory and market changes.

*"I appreciate all the learning I have to do. It keeps my work fresh and interesting. And I enjoy working for the City where I grew up – it's important to me to give back to my community."*

### **Fast Facts:**

- First joined ESD in 2009 as a graduate intern in the Integrated Waste Management Division
- Bachelor's degree in health promotion and disease prevention and a master's degree in urban planning from the University of Southern California
- Received the 2017 ESD All Star Award for Excellence for her outstanding quality of work, leadership and communication





# Water Resources

The Water Resources Division runs the [San José Municipal Water System](#), which serves more than 100,000 people, and [South Bay Water Recycling](#), the largest recycled water system in Northern California.

Muni Water provides clean, safe and reliable drinking water to four service areas: North San José/Alviso, Evergreen, Edenvale and Coyote Valley. Water sources include Hetch Hetchy, groundwater and local reservoirs.

SBWR delivers recycled water from the Regional Wastewater Facility to four water retailers: Muni Water, San Jose Water Company and the cities of Santa Clara and Milpitas.

Approximately 880 customers use SBWR's recycled water for irrigation and industrial uses, saving several billion gallons of potable water every year, enough to fill Anderson Reservoir.

*Water Resources Team*





# 5,000+

Samples collected and analyzed  
to ensure water quality.

## FY 2018-2019 Highlights

- Delivered 5.3 billion gallons of clean drinking water to more than 100,000 people in San José.
- Distributed 4 billion gallons of recycled water through South Bay Water Recycling.
- Focused on water conservation and water supply planning and coordination, including interdepartmental collaboration to monitor and reduce City water use.
- Completed an emergency action plan and conducted successful emergency evacuation and earthquake drills.

## Staff Spotlight: Phil Wolz

Phil Wolz has been a water systems operator for Muni Water for 17 years, performing a variety of roles, from fixing fire hydrants to maintaining pumps, pipes and reservoirs. In his current role with the support services section, he's out in the field helping as many as 25 customers a day who call in with issues like water leaks or questions about their bills.

*"I love my job, I love my customers. I'm a positive, glass-half-full guy. You have to stay positive, because there's so many negative things in this world that could drag you down."*

### Fast Facts:

- Born and raised in San Martin, California
- Licensed by the California Water Resources Board for water distribution and treatment
- Joined Muni Water in 2000 as a meter reader





# WSP

The Watershed Protection Division is charged with protecting San José creeks and rivers from [litter and pollutants](#).

Watershed Protection works to keep trash and toxic material from washing into roughly 30,000 storm drains that empty into San José waterways. Staff ensure the proper maintenance of stormwater treatment measures, from bioretention basins to underground trash-capture devices.

The division provides support to partners like [Keep Coyote Creek Beautiful](#) and [South Bay Clean Creeks Coalition](#) that organize volunteer creek cleanups.

Staff also collect and test more than 50,000 water and wastewater samples every year to make sure our waterways are safe from harmful chemicals, in compliance with state and federal regulations.

WSP Team





# 1,100+

**Number of stormwater treatment measures inspected throughout the city. ESD surpassed its regulatory requirement to inspect an average of 20 percent of these devices per year.**

## FY 2018-2019 Highlights

- Exceeded the Municipal Regional Stormwater NPDES (National Pollutant Discharge Elimination System) permit requirement to reduce trash load entering stormwater system by 80 percent by June 2019, achieving a 96.8 percent reduction.
- Installed six large trash capture devices in the storm sewer system in coordination with the San José Department of Public Works, bringing the total installed to 27.
- Coordinated development of a comprehensive Green Stormwater Infrastructure Plan, which will guide the City's use of natural systems to filter pollutants from stormwater. Staff conducted outreach to the community about the plan and created a GSI maintenance and monitoring plan.

## Staff Spotlight: Brad Hunt

Brad Hunt is an environmental services specialist who strives to reduce the amount of trash entering the municipal storm sewer system and San José waterways. He is Watershed Protection's lead for an interdepartmental project to install large trash capture devices at strategic points in the storm sewer system. He also monitors creeks for trash and helps clean 32 creek "hot spots" along Coyote Creek and the Guadalupe River.

*"Eighty percent of pollution in the ocean comes from land, so when you stop it from entering creeks and rivers, you're also protecting downstream environments and wildlife."*

### Fast Facts:

- Born in Kinston, North Carolina
- Bachelor's degree in marine biology from UC Santa Cruz and a master's degree in international environmental policy from the Monterey Institute of International Studies
- Served in the U.S. Navy as a nuclear propulsion maintenance mechanic aboard a Virginia-class cruiser, the USS Arkansas



Lab Team



The Integrated Waste Division manages solid waste removal in San José, overseeing five haulers that collect trash, recycling and yard waste from 325,000 homes and nearly 11,000 businesses.

IWM is a forward-thinking group that maximizes the amount of recyclable and organic material that is diverted from landfills in keeping with the City's Zero Waste Strategic Plan 2022 and state law.

The division provides other services such as RAPID (Removing and Preventing Illegal Dumping), an [illegal dumping](#) cleanup team; a free [Junk Pickup](#) program; and household hazardous waste (HHW) drop-off.

IWM also develops innovative programs that address global problems, including a pilot with City hauler GreenWaste Recovery and biotech startup [BioCellection](#), which uses chemical processes to transform hard-to-recycle plastics into raw materials for use in other applications.



IWM Team





# 20,674

**Illegal dumping sites cleaned by the RAPID team, up by 40 percent from the previous fiscal year. RAPID collected 3,372 tons of material.**

## **FY 2018-2019 Highlights**

- Diverted 79 percent of solid waste from the landfill.
- Accommodated 17,414 household hazardous waste appointments by San José residents, a 3.6 increase over the previous fiscal year.
- Removed 7,614 tons of large unwanted items from residents through the Junk Pickup program, up from 5,955 tons the previous fiscal year.
- Negotiated new contracts with three of four Recycle Plus contractors and an amended contract and performance period with the fourth contractor.

## **Staff Spotlight: Manuel Bernal**

Manuel Bernal is a maintenance worker and member of ESD's RAPID team. Manuel spends his days out in the community removing illegally dumped material, cleaning as many as 25 sites a day. RAPID plays a key role in removing blight from neighborhoods and improving quality of life.

*"I like helping people. It gives me a good feeling to know that I'm doing something for my community."*

### **Fast Facts:**

- Born in San José
- Studied autobody repair at the Center for Employment Training in San José and completed electrician apprenticeship at the Institute for Business & Technology in Santa Clara
- Before joining ESD, was a team leader at the NUMMI automobile manufacturing plant in Fremont



# S&C

The Sustainability and Compliance Division oversees energy-efficiency programs and makes sure that ESD complies with environmental regulations.

Sustainability staff provide vital support to [Climate Smart San José](#), the City's climate action plan, managing programs that help residents and businesses lower their fossil fuel consumption and greenhouse gas emissions.

The compliance team ensures the department adheres to a variety of regulations, including air and water quality. Staff contribute to the Capital Improvement Program at the Regional Wastewater Facility, making sure projects undergo comprehensive environmental review. They even manage wildlife habitat.

Compliance staff also oversee emergency preparedness and workplace safety, providing extensive training to protect the health and safety of ESD employees.




S&C Team



# 5

**Submitted five-year permit renewal application for a National Pollutant Discharge Elimination System permit, as required by the Clean Water Act.**

## **FY 2018-2019 Highlights**

- Enhanced emergency preparation efforts, including:
    - Successful evacuation and Great ShakeOut earthquake drills at the Regional Wastewater Facility and Muni Water
    - Participation in the San José Police Department's active shooter train-the-trainer course
  - Supported the Office of Economic Development with environmental review of several property transactions for the proposed Google Village project.
  - Created and led an interdepartmental team that took part in racial equity training through the Urban Sustainability Directors Network.
  - Managed the habitat of the largest population of [western burrowing owls](#) in the Bay Area in collaboration with the Santa Clara Valley Habitat Agency and Santa Clara Valley Audubon Society.
- 

## **Staff Spotlight: Andrew Martin**

Andrew Martin is an acting supervising environmental services specialist with the land use and planning group. Andrew supports the Capital Improvement Program at the Regional Wastewater Facility by making sure all projects undergo the proper environmental review and comply with state and federal regulations – or, as he puts it, “doing the right thing for the environment and the people of San José.”

*“I’m pretty amazed by the scale of the services ESD provides. I’m in awe of the fact that the Regional Wastewater Facility has run 24/7 since 1956 without disruption.”*

### **Fast Facts:**

- Born in Kansas City, Kansas
- Bachelor’s degree in biology from Montana University and master’s degree in environmental studies from San José State University
- Served in the Peace Corps from 1996 to 1998, living on a wildlife preserve in Uganda





# Admin

The Administrative Services Division is the glue that holds ESD together, from hiring staff to managing budgets.

Administrative Services helps find talented and dedicated employees to manage the department's world-class programs and services and then gives them crucial support to grow and thrive.

The division recruits and onboards new staff and provides them with opportunities for training and development. IT staff furnish vital technological support.

The division also manages the department's operating and capital budgets, handles payroll, makes payments, procures goods and services, and helps staff secure consulting services.



Admin Team



# 100

**Vacancies filled throughout the department, including three deputy director positions. The division promoted ESD careers at 18 job fairs.**

## **FY 2018-2019 Highlights**

- Provided 37 professional development and computer training courses, plus two academies, to ESD staff.
- Partnered with Evergreen Valley College to offer two courses as part of Evergreen's [Water and Wastewater Technology](#) program.
- Hosted a Cristo Rey San José Jesuit High School intern through the school's Corporate Work Study Program.
- Updated all fiber and ethernet cabling at the RWF, improving the speed of City network and internet connections.



Made vital contributions to successful City budget and financial accounting processes.



## **Staff Spotlight: Shellyne Urban**

Shellyne Urban is the human resources manager for ESD, overseeing the department's recruitment, onboarding, training and development of employees. It's a vital role in a department with more than 550 employees at multiple facilities. Shellyne finds it rewarding not only to help new employees join ESD but also to prepare existing staff for opportunities to stretch and learn.

*"My favorite thing about working at ESD is that all my coworkers are my customers. It makes me happy to support them, because I know they are doing great work for the community."*

### **Fast Facts:**

- Grew up in the Santa Cruz Mountains community of Redwood Estates
- Bachelor's degree in English and comparative literature from San José State University
- Joined the City in 1989, supporting the press office of Mayor Tom McEnery

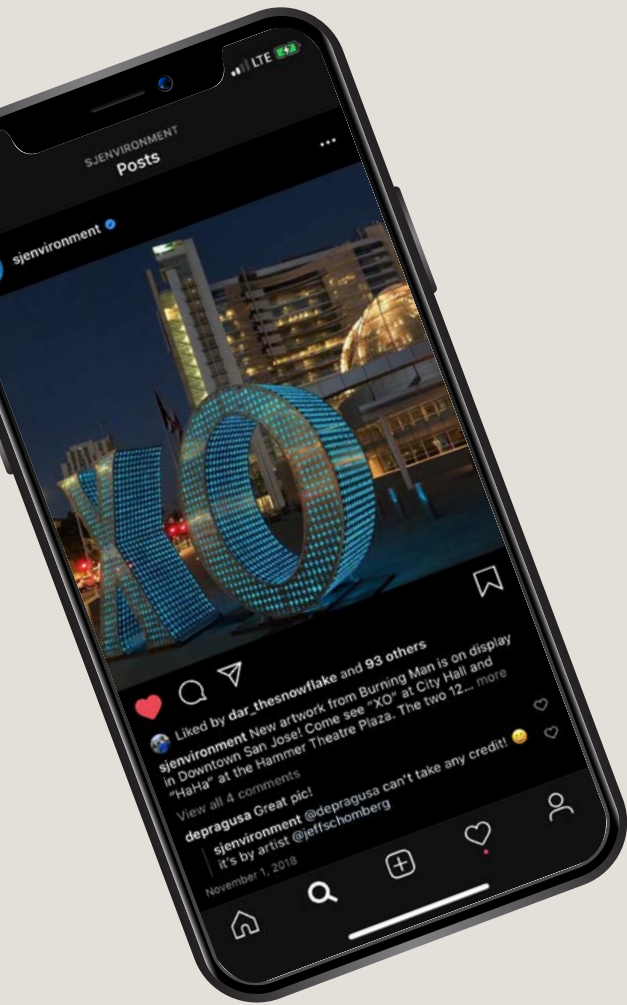


# CommDiv

The Communications Division, or CommDiv, raises awareness about ESD's programs and services and engages the community to take environmental action.

The division is innovative and agile, providing a wide range of services, from carrying out public awareness campaigns to community outreach. CommDiv is committed to listening and sharing critical program information. Staff develop and implement comprehensive outreach plans that include social media, video, TV and radio advertisements, and many more tactics. CommDiv also engages Spanish- and Vietnamese-speaking residents, the largest groups of non-English speaking residents in San José.

CommDiv emphasizes transparency, responding to media inquiries and all ESD-related Public Records Act requests in a timely manner. In addition, CommDiv staff are trained in emergency preparedness and support ESD's utilities during emergencies, ensuring residents receive timely information. They maintain a robust crisis communications plan and participate in annual emergency communications drills.



*CommDiv Team*



# 28%


Continued growth of ESD social media platforms, including a 28 percent increase in Facebook followers. Totaled 34,108 engagements on [Twitter](#) and 42,190 on [Facebook](#) in support of ESD programs and services.

## FY 2018-2019 Highlights

- Enhanced outreach in Spanish and Vietnamese, including a Spanish-language interview about Climate Smart San José on Univision morning show “Despierta Area de la Bahia.”
- Conducted annual emergency communications exercise at the Regional Wastewater Facility in coordination with a facilitywide evacuation drill.
- Developed a comprehensive [Recycle Right](#) public awareness plan to improve residential recycling practices, emphasizing the importance of cleaning items before recycling them.
- Coordinated second annual San José Earth Ride celebrating Earth Month and promoting Climate Smart San José.



Recognized by the U.S. Green Building Council for extensive outreach in English, Spanish and Vietnamese in support of Climate Smart San José.



## Staff Spotlight: Kristen Van Kley

Kristen Van Kley is a senior public information representative, overseeing residential outreach for the Integrated Waste Management Division. Kristen helped develop ESD’s new Recycle Right public awareness campaign and has led the promotion of many other programs, including ESD’s green partnerships with the San Jose Sharks and San Jose Earthquakes.

*“One reason it’s satisfying to work for the City of San José is that I’m able to have a positive impact on the lives of so many people. I admire how hard the people at ESD work and how we’re always stretching to innovate and improve our programs.”*

### Fast Facts:

- Born in Grand Rapids, Michigan
- Bachelor’s degree in geology from Calvin University in Grand Rapids
- First came to California in 2001 to lead youth backpacking trips





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[www.sjenvironment.org](http://www.sjenvironment.org)

#KeepSJClean

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