

2023

ANNUAL
REPORT

SALT LAKE CITY
DEPARTMENT OF PUBLIC UTILITIES



“The water was expected to rise several feet in the next few days, and it could cover the road, but it’s expected. Sugar House Park was designed to be a detention basin for excess water.”

Lofton, 2023

Sugar House Park retention basin, pictured during 2023 spring runoff

Photography: Ed Kosmicki

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COMMUNITY

“It’s our responsibility to make sure we provide good information to the community. The community is very concerned about risk. An extraordinary snowpack like this requires an extraordinary reaction.”

Rascon, 2023

January 2023 found many of us here at Public Utilities rejoicing in the record-breaking snowfall along the Wasatch Front. According to the US Drought Monitor, Utah has been in a state of “extreme drought” since June 2020. The continued snow provided us all the opportunity to take a collective sigh of relief. And yet, my staff and I found ourselves faced with a potential challenge: how will our community face and weather the runoff season to follow?

Fast-forward to April 12, 2023: the morning on which our very own Jesse Stewart, Deputy Director, initiated notifications of the “first flood response of the runoff season” (Apgar, 4/15/2023). Our team, joined by Mayor Mendenhall, representatives from SLCPD, SLCFD, and Salt Lake County, mobilized almost immediately. The days that followed epitomized Salt Lake City’s reputation for community members supporting one another in times of need.

This year’s runoff season persisted for nearly 60 days. I was overwhelmed by the support we received, beginning with our SLCDPU team and expanding out to Salt Lake County Flood Control, many of our Salt Lake City departments, and members of the public throughout our service area. Ultimately, we survived this season stronger and better still for what we learned as a result. But this success would not have been possible had it not been for a few critical factors.

Risk assessment and planning: the runoff season and the historic floods of 1983 served as a powerful lesson for our team. Infrastructure improvements in the time since 1983 enabled a more orderly runoff season, along with our improved ability to manage our assets. Our infrastructure improvements continue through all of our utilities to ensure we meet our public obligations to provide drinking water, stormwater, sewer, and street lighting services. This year, construction on the City Creek Water Treatment Plant officially begins. We’ve made significant progress on the New Water Reclamation Facility and have every expectation that momentum will continue in the years to come. We have coordinated with internal and external stakeholders to execute several other projects throughout Salt Lake City and our service area.

Commitment to public service in a time of crisis: Salt Lake City employees from several City departments (including our own), and the Salt Lake County Flood Control Division truly prioritized emergency response. For much of April and May, 35-40 of our employees coordinated

around-the-clock monitoring of potential issues throughout the City. The efforts of our ‘Stream Teams’ (as they were dubbed) prevented catastrophic problems on a daily basis throughout their deployment. Our administrative leadership collaborated regularly: scrutinizing the data, managing our resources to account for expected changes, ensuring our ability to respond quickly and effectively.

Community support: in the Wasatch Hollow neighborhood, Mayor Mendenhall didn’t hesitate to grab a shovel and begin filling sandbags when the waters of Emigration Creek breached their banks and flooded the area. She wasn’t alone. People from around the City asked how they could help. Our team scheduled opportunities for our neighbors to come together and fill sandbags. The flooding emergency was met with a flood of community support. Members of our ‘Stream Teams’ received greetings and compliments as they made their way around the City. Gifts of milk and cookies made their way to those employees who worked extra hours. Thank you notes filled our mailboxes once the worst of the flooding had subsided. And, let’s not forget the outpouring of help from the business community, including donations of sand from Geneva Rock.

While we were greatly helped by the weather during spring runoff this year, it was our community that showed us all where our priorities do in fact lie: with our families, neighbors, and supporting one another.

As we settle in for the winter, I am hoping for yet another healthy snowpack to help replenish our streams, rivers, and lakes, including Great Salt Lake. This past winter was not insignificant in terms of water supply, but we are still in a hydrological drought, and Great Salt Lake remains at a very concerning level. One good water year does not solve that crisis. But I am confident in our collective ability to address concerns related to our water supply. The 2023 runoff season taught me that, and I hope that you find many examples of that same ethic in the pages that follow.

Sincerely,

Laura



Salt Lake City Mayor Mendenhall and a resident during community sandbag filling

2023 RECORD BREAKING SNOW

SIX CREEKS BASIN

49"

Peak Snowwater Level
April 6, 2023

Previous
Peak Snowwater Level
May 3, 2011

46"

That's 19" higher
than the record-
setting, statewide
snowwater level!

"We are absolutely, undoubtedly
much better prepared today for the
record snowfall that we've received
than we were in 1983."

Salt Lake City Mayor Erin Mendenhall
Tavss, 2023

SLCDPU's Hydrology team organized
the collection of many data sets
relative to the snowpack. Some of
the data collected were temperature
profiles throughout the snowpack
at different elevations and aspects.
Using some basic physics principles
and analyzing models created by
partner agencies, we were able to
make educated guesses as to when
a particular area was going to melt
and add to the surface water runoff.
Though physically and mentally
demanding for our staff, it was
critical to inform our downstream
neighbors of when and where to
expect high flows in the creek.

"Salt Lake City Department of Public
Utilities collaboration and proactive
efforts at every level not only help
to prepare for potential flooding but
also created an effective response
and brought people across the
City together to help communities
affected by the runoff."

Council Member Darin Mano
District 5

SPRING RUNOFF

PEAK FLOWS

611 CFS

Big Cottonwood Creek
May 25, 2023 @ 2:00am

135.1 CFS

City Creek
May 25, 2023 @ 11:00am

RAPID ASSESSMENT TEAMS

35

Employees worked

1,895+

hours

to identify and mitigate
issues around-the-clock

"Watching the creeks and rivers
in Salt Lake is a 24-hour, 7-days-
a-week operation that is being
handled by what they call 'The
Stream Team.'"

Rascon, 2023

STORMWATER CREWS

Filled

16,350

sandbags

180 tons of sand remained on hand, which
is being repurposed for daily use.

Thank you to the following organizations for their support

SLC Mayor's Office
SLC Fire Department
SLC Police Department
SLC Division of
Emergency Management

SLC Parks & Public Lands
Salt Lake County
Mayor's Office

Salt Lake County Division of
Emergency Management

Salt Lake County Flood Control
Wasatch Hollow Community
Council
Geneva Rock
Goldman Sachs

Salt Lake City and County residents



Salt Lake City residents participate in a community
sandbag filling event

"HUNDREDS
OF
VOLUNTEERS
spent their time
filling and placing
sandbags along the
creek bed to divert
water from homes."

Porter, 2023

STORMWATER

Did you know anything that is on the surface of our City has the potential to become water pollution when it rains or snows? It's true! Such surfaces include: roads, sidewalks, parking lots, parks, landscapes, etc., and there are many urban pollutants. In large, unexpected, or unnatural quantities, even dirt can be considered a pollutant. But so are trash, litter; gas, oil, metals (from cars and trucks); soaps, solvents, paints; pesticides, herbicides; landscape waste (including leaves and pruned vegetation); pet waste (especially dog and waterfowl feces); and the list goes on. All of these can be harmful to water resources when washed downstream.

While the sources of pollution are often difficult to control, we do what we can to reduce these pollutants to protect our local waterways. We do this in many ways, here are just a few:

Permits: We issue permits which enable us to enforce water quality regulations to prevent pollution from industrial, commercial, institutional sources and construction activities. We also respond to and monitor accidental and intentional pollution discharge incidents.

Education: We educate residents/businesses about stormwater pollution sources and prevention practices that all can employ.

Monitoring: We monitor runoff discharges to ensure that stormwater is as clean as possible before flowing to our creeks and rivers, and look for pollution during both dry and wet weather to ensure that our storm system is not being used to illegally dispose of pollutants or wastewater.

Prevention, identification, and elimination of pollution is a big job and one that we do, gladly, with the help of our local residents, businesses and partners.



Soap discharge



SLCDPU's Stormwater Quality team, pictured left to right: Matthew Hendrix, Shaunna Mills, Alicia Hintemeyer, Dustin Whitaker, Alexander Tuttle, Greg Archuleta, Chris Aragon

In 2023, we:

Inspected
99
industrial facilities
for
stormwater quality
compliance.

Inspected
205
construction sites for SWPP
compliance

2,102
inspections with

78
enforcement actions issued for
non-compliance

Responded to and investigated

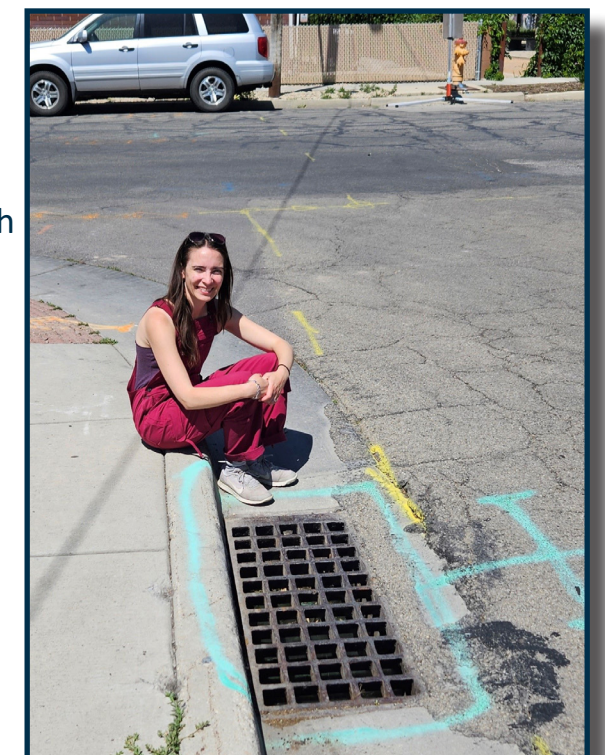
67
incidents of illegal discharges
and recovered

\$11,764
(approx.)
in costs

ADOPT A STORM DRAIN

It is important to remember that storm drains can also easily become clogged with plastic bottles, trash, leaves, debris, and more. This can lead to localized flooding and pollution in our waterways. To combat this, we are excited to have developed an Adopt A Storm Drain Program, which kicked off in 2022, and allows volunteers to contribute to cleaner communities and healthier waterways by signing up to clean a storm drain (or drains) of their choice. Together we can prevent stormwater pollution!

88 Residents have adopted
157 storm drains
and reported removing
1,625 lbs. of debris during
155 cleanings



SLC Resident Tess Menotti & 'adopted' storm drain, "Bart Simpson," on Salt Lake City's Simpson Avenue. Individuals who participate in the Adopt a Storm Drain program can name their drain.

WATERSHED

Big Cottonwood Canyon, near Catherine's Pass



**Thank you to everyone
at Public Utilities for your
continuous efforts in
protecting our source waters.** ”

*Council Member Victoria Petro
District 1*

Wildfire Threat Reduction

SLCDPU's Watershed Division continued its extensive collaboration with partners to reduce wildfire threat.

Actions taken include wildfire threat reduction planning; fuels reduction in Parleys, Lambs, and Millcreek Canyons; as well as public outreach to communicate the growing threat of wildfire to culinary water supply. New projects are planned in Emigration, Parleys, and Big Cottonwood Canyons. Working with the US Forest Service, the Utah Division of Wildlife Resources, the Utah Division of Forestry, Fire and State Lands and other partners, like the nonprofit Save Our Canyons, this partnership collaborates on fuels reduction threat while maintaining the integrity of the valley's water supply.

Secret Lake Interpretive Panels & Albion Basin Visitor Orientation Panels

New interpretive signage was installed along the trail to Secret Lake at Alta in Little Cottonwood Canyon. Located at the headwaters of Little Cottonwood Canyon, this renowned trail receives well over 100,000 visitors each summer, according to the US Forest Service. Signs were additionally posted at varying entry points for visitors at each trailhead in the Town of Alta. Both the interpretive panels and orientation signs educate visitors as to geology, wildlife, water supply, and public lands. This project was funded in partnership by SLCDPU, the Town of Alta, Alta Ski Lifts, the Central Wasatch Commission, and the State of Utah.

Great American Outdoors Act

SLCDPU has continued its work through an agreement with the US Forest Service in the implementation of the Great American Outdoors Act. Aimed at addressing the capital maintenance backlog of restrooms, water systems, campgrounds, and recreation facilities in Big and Little Cottonwood Canyons, this project ultimately will deliver site surveys to the US Forest Service in preparation for needed upgrades, repairs, and improvements in these facilities in the protected watershed. Most of the recreational sites in these canyons have been surveyed by a professional firm in preparation for potential large capital upgrades. Functional and well-maintained restroom facilities are essential to clean culinary headwaters and public health in the valley below.

Volunteer Restoration Work

Working with local organizations such as Dedicated Hunters, Save Our Canyons, and Sageland Collaborative, the Watershed Division reseeded 46 acres of land with 868 lbs of seed in areas previously disturbed by invasive weeds. They also spent 218 hours pulling 11 acres of invasive weeds, such as Garlic Mustard and Dyer's Woad. Volunteers also helped install 31 new beaver dam analogues (BDAs) in Parleys Canyon and performed maintenance on 18 previously installed BDAs in Lambs Canyon. These BDAs help restore wetland ecosystems and maintain riparian corridors in the face of aridification. Total volunteer hours were 468 with over 94 volunteers participating. Volunteer work is an expanding component of SLCDPU's Watershed restoration and rehabilitation work.

HYDROLOGY

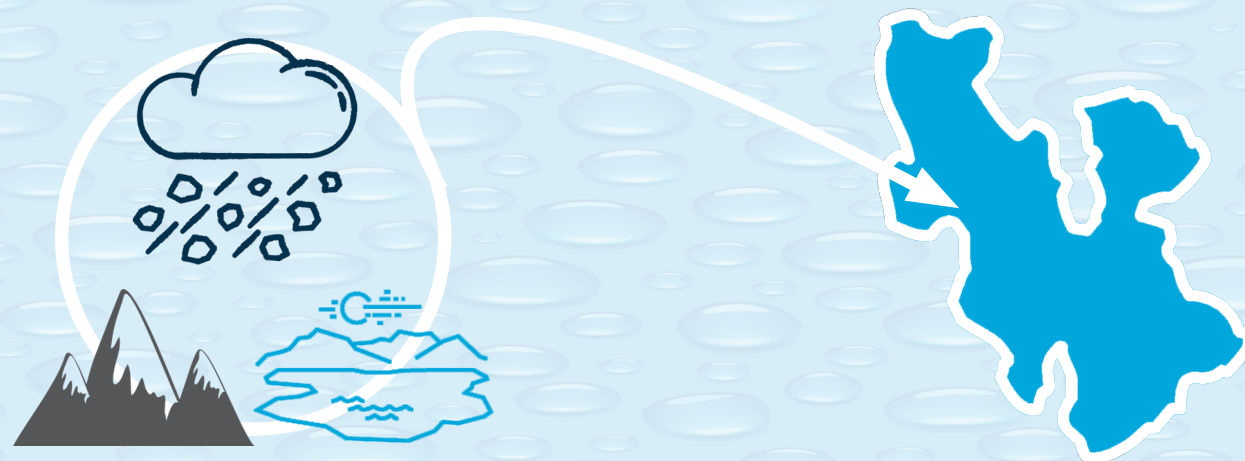
This year, our Hydrology team managed to upgrade many measurement sites throughout the Jordan River Watershed. Many of these sites are associated with the streams that provide drinking water to Salt Lake City. Others are associated with bodies of water that are tied to Salt Lake City's water rights. Most of the upgraded sites were along our extensive canal system where we measure each diversion. We now have remote access, via telemetry, to more than 35 measurement sites throughout the Jordan River Watershed.

Moving forward, we anticipate using telemetry and new measurement collection techniques to help develop a water budget for Great Salt Lake. Our City's namesake water body is in crisis. We must determine how to better support the health of the Lake. We will work with our partners throughout the state to accurately assess the situation and to identify actions we can take to contribute to the solution.

Developing a Water Budget For Great Salt Lake



Hydrologist John Wells measures 2023 record-breaking snowpack



WATER RIGHTS

The State General Adjudication, which began in earnest in 2017, is continuing through the East half of Salt Lake County. This year, we saw the proposed determinations (PD) published that involve our Utah Lake and Little Cottonwood water rights. It is expected all the PDs for the remaining Big and Little Cottonwood drainages will be published by the end of 2024. City Creek, Red Butte, Emigration Creek, Parleys Creek, and Millcreek are nearly settled.

DRINKING WATER

Cross-Connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A potential cross-connection is formed at any point where a drinking water line connects to equipment, systems containing chemicals, or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line. Community water supplies are jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We survey industrial, commercial, and institutional facilities to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and require annual testing of backflow preventers, ensuring that they provide maximum protection.

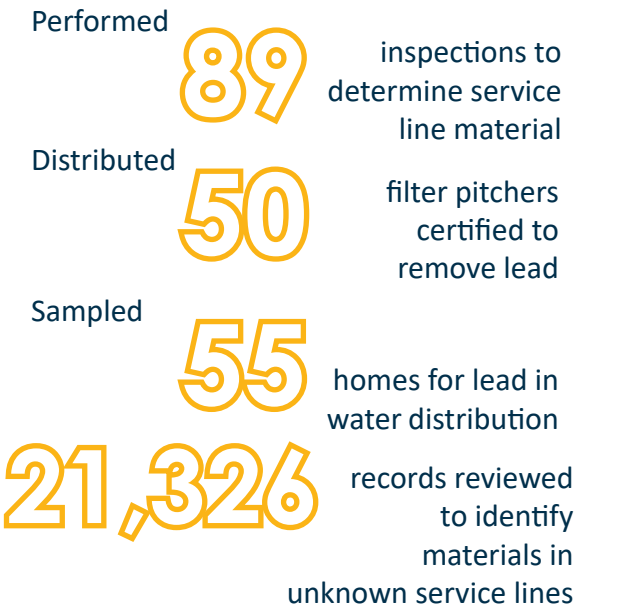


Lead & Copper

In 2023, we rolled out our Lead & Copper program in compliance with the EPA’s revised rule. Water suppliers nationwide are now mandated to develop and report inventories of all lead service lines throughout their service area. We added and filled two new technician positions, whose primary responsibility it is to assist with identification of lead and copper service lines. The Lead & Copper team perform in-home inspections, review survey responses submitted by residents, research City records to identify material used in service lines, and respond to residents’ questions and concerns related to lead and copper rules.



Mayor Erin Mendenhall, SLCDPU employees Taylor Knorr and Austen Tingey, Council Member Chris Wharton (from left to right)



In 2023, we:

Conducted rigorous community sampling of our drinking water. This sampling shows that SLCDPU’s drinking water remains among the highest-quality in the nation.

We conduct **170+** tests for individual contaminants to ensure our drinking water meets all state and federal standards from our water sources and throughout the distribution system.

Last year we conducted more than **18,000** tests. **3,237** bacteriological samples were manually collected from our water distribution system.

0 positive results for total coliform and e. Coli tests.

“Salt Lake City Department of Public Utilities has consistently gone above and beyond EPA standards to treat our water and keep our residents safe and healthy.”

Council Member Alejandro Puy
District 2

Little Dell Reservoir

WATER TREATMENT PLANTS

We own and operate three surface water treatment plants. Our surface water treatment fuses a multi-step treatment process, including coagulation and flocculation, sedimentation, filtration, and disinfection.

City Creek Water Treatment Plant

In 2022, we received a \$36.6M federal grant and are implementing upgrades of the City Creek Water Treatment Plant, which was the first municipal water treatment plant built in the State of Utah. Construction on the second phase of the project started in November 2023, with plans to begin the third (most significant) phase in January 2024.

Big Cottonwood Water Treatment Plant

The Big Cottonwood Water Treatment Plant (BCWTP) was originally constructed between 1957 and 1959. Due to the aging infrastructure, we are in the process of developing a plan to rebuild this plant. In 2022, a pilot study was completed. Pilot studies are commonly used by engineers and water treatment operators to replicate different water treatment methods and conditions at a much smaller scale before designing and constructing a much larger facility. For more information, visit www.keepitpurebigcottonwood.com

In an effort to increase redundancy in our system, we are undertaking a construction project, in partnership with Metropolitan Water District of Salt Lake and Sandy (MWDSLS), to place a new pipeline that will allow for MWDSLS to treat Big Cottonwood Creek water while BCWTP is being rebuilt.

While these plans are finalized, routine maintenance continues at the plant. In 2022, repairs were made to the flocculation basins.



Parleys Water Treatment Plant

Parleys Water Treatment Plant was offline for a portion of the season to facilitate repairs to Mountain Dell Reservoir. A Cofferdam was installed to hold water back from the face of the dam at Mountain Dell Reservoir, allowing sediment to be removed from the base of the dam which will help with future maintenance projects. After going back online in April, we were able to treat water from Little Dell Reservoir.



PRE TREAT MENT

The goal of our Wastewater Pretreatment Program is to provide for the health, safety, and welfare of the community and City employees; the sanitary sewer system; and, the environment. The Pretreatment Program has diligently worked to meet this goal and to ensure the City's compliance with all aspects of federal, state, and local regulations related to the discharge of commercial and industrial process wastewater into the sanitary sewer system. The Pretreatment Program helps businesses understand and provide evidence of compliance with the wastewater discharge pollution limits stipulated in City Code (i.e., wastewater control ordinances).

2023 Notable Achievements

Worked with local commercial and industrial businesses to help them better understand how various pollutants within wastewater discharges impact the City and the environment.

Monitored the wastewater discharge from numerous and significant commercial, industrial, and manufacturing facilities in the City.

Issued more than 170 noncompliance actions to commercial and industrial facilities for violations of the City's wastewater control ordinances including approximately

\$275,000
in fines and various cost recovery.

Responded to the illicit discharges of

**FATS & OILS
GREASE**

and various chemicals and surfactants that caused blockages and other issues within the sanitary sewer collection and conveyance pipelines, to identify and eliminate the source(s).

Inspected more than

700
food service establishments and other commercial businesses to discuss best practices to prevent fats, oils, and grease and other pollutants from entering the sanitary sewer system.

2024 Goals

The Pretreatment Program is evaluating the impact of emerging contaminants such as perfluoroalkyl and polyfluoroalkyl substances (PFAS) discharged into the sanitary sewer system from industrial and commercial facilities as well as residential locations. We are looking forward to increased understanding of these and other pollutants of concern, their impact on the environment and public health, and how we can do our part to limit their release into the sewer system with adequate treatment by the generator.

WATER RECLAMATION

Our team continues perfect compliance while operating a 60-year-old treatment facility at the same time a new one is being constructed – a testament to their dedication!



29th
Platinum
Award

National Association of Clean Water Agencies (NACWA)

The Peak Performance Awards recognizes NACWA member agency facilities for excellence in permit compliance.

Platinum Awards recognize 100% compliance with permits over a consecutive five-year period.



Robert Duree, Business Administration Manager at the Water Reclamation Facility

Water Reclamation Facility (WRF) Administration

This year, we added two new positions to our team. The Computerized Maintenance Management System (CMMS) Administrator manages our CMMS and Asset Management Software programs. This will provide needed improvement to Facility Maintenance Management and the Asset Management Plan, effectively improving our ability to predict needed equipment maintenance and replacements prior to failures. The Employee Development Manager develops, coordinates and evaluates training, performance management, succession planning, and other employee programs. This is particularly critical as we are building a new Water Reclamation Facility (WRF) with new technologies unfamiliar to the WRF staff. Staff will need to be trained and competent to operate and maintain the new facility.

The public entrance to the WRF administration building was updated with an interior entry control point with audio/video communication to better protect City personnel.

Laboratory

The WRF laboratory continues to deliver high quality analytical services as they collected and analyzed thousands of samples providing over twenty-four thousand data points needed to inform operational adjustments and demonstrate regulatory compliance with our Utah Pollutant Discharge Elimination System (UPDES) permit requirements. The analytical service provided by the WRF Laboratory limits the need for outsourcing costly analytical services.

Maintenance

WRF maintenance staff performed over two thousand corrective and preventative work orders including:

- Removal and reinstallation of all four influent pumps for rebuild, with no interruptions to service. These pumps are crucial in pumping all incoming wastewater to the main facility for treatment.
- Replaced obsolete digester mixers with updated models, providing increased reliability.
- Completed mechanical and structural repairs to address issues caused by the 2020 earthquake.
- Continues to keep the aging cogeneration system operational that is at the end of its service life cycle, while exploring upgrade or replacement options. The Cogeneration system is extremely critical to the successful operation of the WRF. Methane gas is a byproduct of the mesophilic digestion process used at the facility. The methane gas is captured from the digestion process and utilized as a fuel source in the cogeneration system to produce approximately half of the electrical power needed to operate the facility as well as provide a heat source for the digestion process.



Team members consulting at the Water Reclamation Facility

Operations

Partnered with the New WRF design firm and the University of Utah to design and build a pilot sized unit replicating the Biological Nutrient Removal (BNR) processes the New WRF will be using. The pilot unit demonstrated the ability for the selected BNR processes to treat WRF wastewater and meet future water quality standards as well as provide critical hands on training for the WRF staff to operate BNR processes prior to the startup and commissioning of the New WRF.

The New WRF will have initial capacity to treat 48 MGD

WRF FLOW DATA

33 Average daily flow in million gallons per day

Maximum daily flow in million gallons per day **53**

12 BILLION

Annual total

SUSTAINABILITY

Over the last year our sustainability team has:

Finalized a Site Characterization Plan for our Voluntary Clean-Up Agreement with the Department of Environmental Quality for the Police Mutual Aid Association (PMAA) Gun Range site for lead remediation, and removed the former Clubhouse on the site in an effort to reduce vandalism and trespassing.

Started the Envision process for promoting sustainability for the City Creek Water Treatment Plant upgrades project.

Applied for federal and state grants and submitted appropriation requests to help offset cost of infrastructure projects to rate payers.

Maintained sustainability planning for current and future projects and work with other City departments to coordinate sustainability efforts on cross departmental projects.

Future projects include:

Finalizing site characterization and planning for remediation at the PMAA site

Finalizing credits and registering both the Water Reclamation Facility and the City Creek Water Treatment Plant rebuild for Envision certification and verification

Working with a consultant to prioritize sustainability efforts for the Department

City Creek Canyon protected watershed

Sustainability accomplishments at the New Water Reclamation Facility

Reviewing and updating efforts for

ENVISION

certification

Use of recycled materials in construction

2,007,711

tons used

50%

project material is recycled

Reducing construction waste

Currently

99.96%

construction material recycled

Waste diverted from landfill

Balancing Earthwork on-site



That's 25% higher than required for Superior Envision level

That's nearly double the Enhanced Envision goal!

All excavated materials are reused within 25 miles of the New WRF site

WATER CONSERVATION

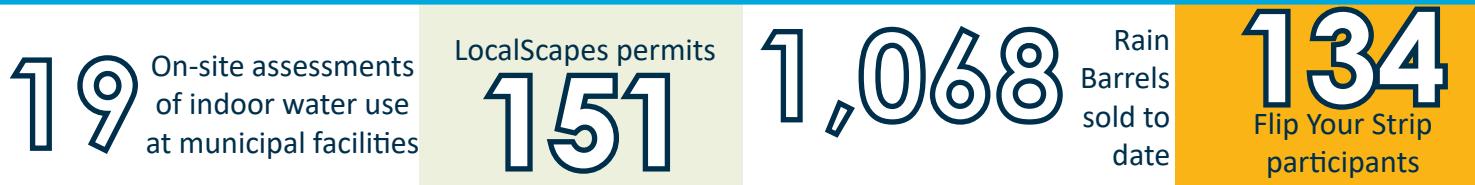
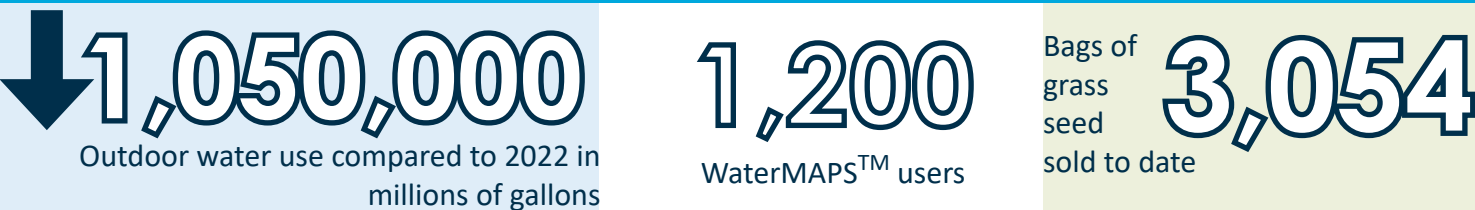
In 2023, we continued to introduce innovative programs designed to assist customers in achieving sustainable, immediate, and long-term water use reductions, whether in the residential, commercial, or municipal sectors. This year, Mayor Mendenhall called for a study of Citywide water use practices, a project which fit seamlessly with the newly launched Commercial Water Assessment program. As a result of this call-to-action, our team gathered and analyzed water use data, conducted on-site indoor assessments and Water Checks on select properties, and will be generating a report of findings.

In collaboration with Utah State University's Center for Water Efficient Landscaping (USU-CWEL), the conservation team launched WaterMAPS™, a software analytics program that assists property owners in determining how much they might be over or under watering their landscapes.

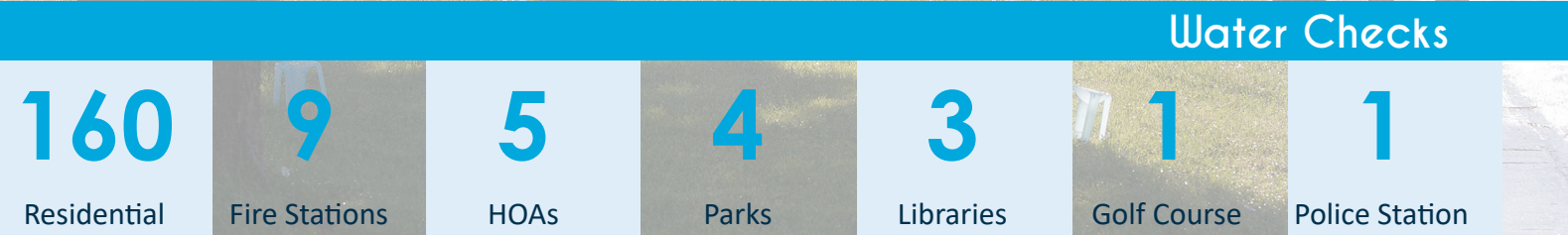
Spring brought another round of sales of SLC TurfTrade low-water grass seed. Not only is demand growing, but several other communities and water districts also brought in seed to host their own sales, including Ogden, Provo, Granger-Hunter Improvement District, and Central Utah Water Conservancy District.

Utah's women leading out on water conservation

(from left to right)
Stephanie Duer
 SLCDPU Water Conservation Program Manager
Laura Briefer
 SLCDPU Director
Erin Mendenhall
 Salt Lake City Mayor
Dr. Joanna Endter-Wada
 Utah State University (USU) Professor,
 Natural Resource Policy & Social Science
Chris Garrard
 USU Programer / Analyst
Dr. Kelly Kopp
 USU Professor
 Center for Water Efficient Landscaping Director
Tamara Prue
 SLCDPU Water Resources Manager



Water check in progress at Salt Lake City Sports Complex



Geographic Information Systems (GIS) have evolved to mission-critical status for our Department. Utilizing our team of skilled professionals, we are able to provide complex and layered mapping systems which track and monitor assets and data throughout our entire service area. The nature of their work also lends itself to supporting other information technology (IT) initiatives on which our Department depends.

GIS/IT

2023 Accomplishments

DIGITAL EQUITY INITIATIVE

Distributed phones to all Department employees, demonstrating our commitment to promoting digital equity.

WORKDAY

Incorporated WorkDay software in the Department's standard workflow for improved efficiency and data management.

UTILITY NETWORK GIS

Initiated implementation of our new Utility Network GIS Model, a critical step in modernizing our infrastructure GIS data utilization and management.

LEAD & COPPER PROGRAM

Developed mapping tools and provided technical support for the Lead & Copper program, ensuring regulatory compliance.

'KEEP IT PURE' PROGRAM

Collaborated with our Watershed Division to update 'Keep It Pure' signage and materials.

ADOPT A STORM DRAIN

Created mapping tools, survey forms, and a dedicated web page, engaging the community in stormwater stewardship.

CITYWORKS PLL

Software enhancements Department-wide intended to improve our asset and work management capabilities.

ARCGIS ENTERPRISE

Successfully implemented the ArcGIS Enterprise Portal, providing a robust platform for spatial data collaboration and analysis.

COLLABORATION

Provided support to other City departments to address their mapping and software needs, fostering synergy and efficiency across the organization.

Maintained an impeccable record with no security breaches, ensuring the integrity and confidentiality of our data.

The need for complex technology to support our growing infrastructure needs and customer base multiplies daily. We look forward to expanding our team to improve our ability to provide services throughout the Department, service area, and City.



GIS/IT staff participates in the 2023 'Maps on the Hill' event

OPERATIONS & MAINTENANCE

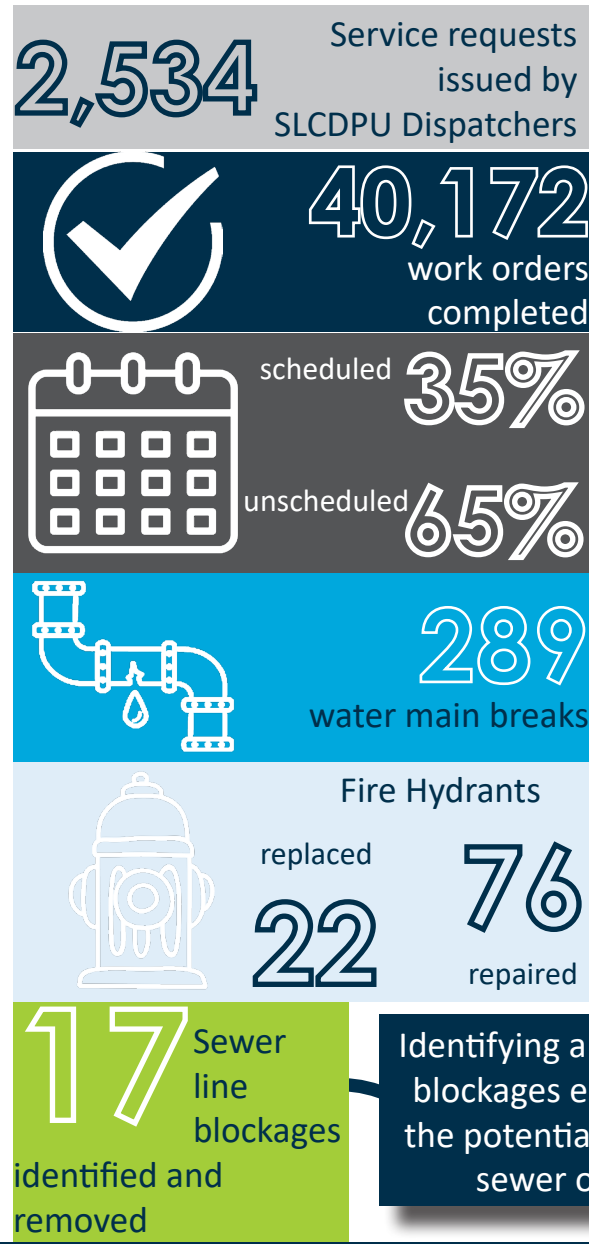
“We want to express our appreciation for the excellent work of the employees of the Salt Lake City Public Utilities Department in maintaining the source of irrigation water for our neighbors and at our home on Lincoln Street.”

Isabelle & Lawrence Buhler
Salt Lake City residents

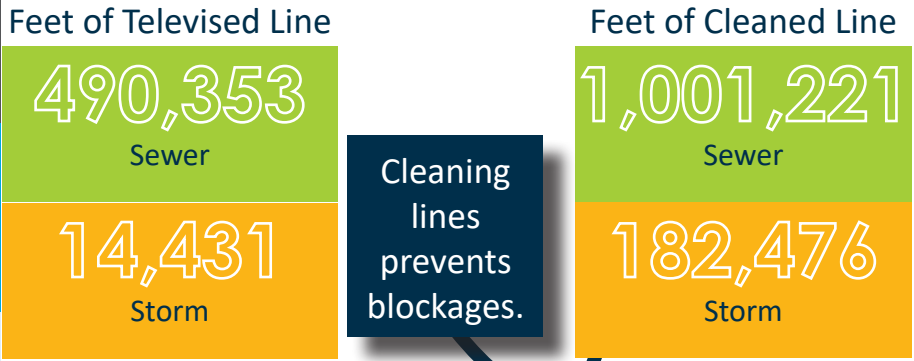
The words from the Buhlers underscore the critical importance of our Operations & Maintenance crews. The emergent and continuous nature of their work can create a high-pressure and fast-paced environment. Still, these employees maintain high standards of professionalism and dedication.



Sewer crews utilize the Department's new Vactor Water Recycler to perform regular cleaning and maintenance

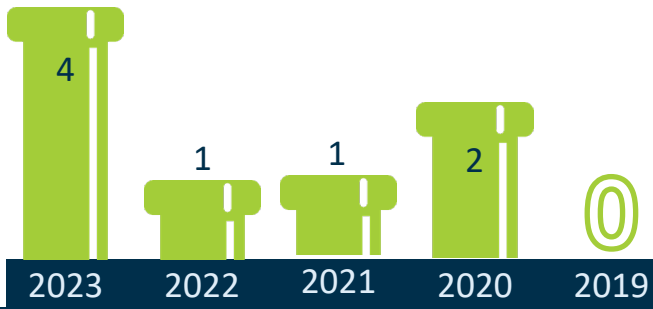


Televising lines allows us to better prioritize those to be cleaned.



Cleaning lines prevents blockages.

SANITARY SEWER OVERFLOW EVENTS BY YEAR



Identifying and mitigating blockages early reduces the potential for sanitary sewer overflow

STREET LIGHTING

We oversee the City's street lighting, balancing the needs for safety, character, public health, environment, and equity.

Indiana Avenue Lighting Upgrade

This project promotes pedestrian and bicycle activity in the area. The lights are also spaced closer together to minimize dark spots and provide better night comfort.

- Removed over 40 wood poles with all the corresponding overhead wires.
- Installed decorative, pedestrian-level lights to create more of a "corridor" effect.

State Street Lighting Installation

We installed new lights on State Street from South Temple to the Capitol and along the south frontage of the Capitol

“We're grateful to the street lighting team for their dedication to keeping family, friends, and neighbors feel safe as they travel throughout the City.”

Council Member Ana Valdemoros
District 4

We've already received compliments and appreciation from the community for preserving the historic style.

Standardized Specification

We developed a standardized specification manual, providing guidance and details about all pole and light combinations accepted throughout the City. Specifications are available to share with developers and contractors to enable advance planning and compliance.

LOOKING AHEAD

- Expand lighting specifications to include more detailed construction standards and to simplify street lighting installation
- Continue a years-long survey of the City's lighting system for asset management purposes
- Expand on the Department's existing street banner program



Public street lighting poles on 300 West

Yale-Harvard Restoration

Aging concrete poles in the neighborhood are in desperate need of updating. The style of the original poles are beloved and are as much a fixture as the fixtures themselves. In an effort to balance both needs, the decision was made to restore the original poles.

CAPITAL IMPROVEMENT

Our Capital Improvement program accomplished much over the past year. Overcoming challenges such as staffing shortages and turnover associated with organizational advancement, the team continues to operate efficiently and effectively.

Completed Phase 1 of the East-West Conveyance Line - Park Reservoir to Sugarhouse Park project.

Completed two of twelve small area stormwater master plans, including those for the lower Sugar House and Rose Park areas.

Started construction of an estimated \$25M 1800 North Sewer Rehabilitation Project that replaces key and aged wastewater collections infrastructure critical to meeting the needs of Salt Lake City's downtown and eastern most service area.

Started construction of the 2100 South Sewer Capacity Project, necessary to upsize the existing sewer main in advance of planned roadway improvements within the Sugar House neighborhood. This project will ensure reliable service, improve resiliency, and support planned growth within the area.

Started construction on the City Creek Water Treatment Plant Upgrades project. This project is intended to replace aging infrastructure, improve seismic resiliency, and replace equipment that is beyond its useful life.

Continued construction of the Mountain Dell Dam rehabilitation and restoration project. This project is intended to extend the useful life and increase resiliency of the dam. The Mountain Dell Dam rehabilitation project is required to meet regulatory requirements associated with dam safety and is intended to be completed in 2025.

Completed nearly \$8 million of design and construction work at the Parleys Water Treatment Plant. This effort began in 2019 and focused primarily on upgrading the SCADA (instrumentation and control) system to a more modern, automated system. Antiquated chemical storage and feed equipment was replaced with newer, modern facilities.

In addition to multiple continuing projects, the Capital Improvement Program started 133 new projects in 2023 to improve reliability, capacity, and increased level of service.

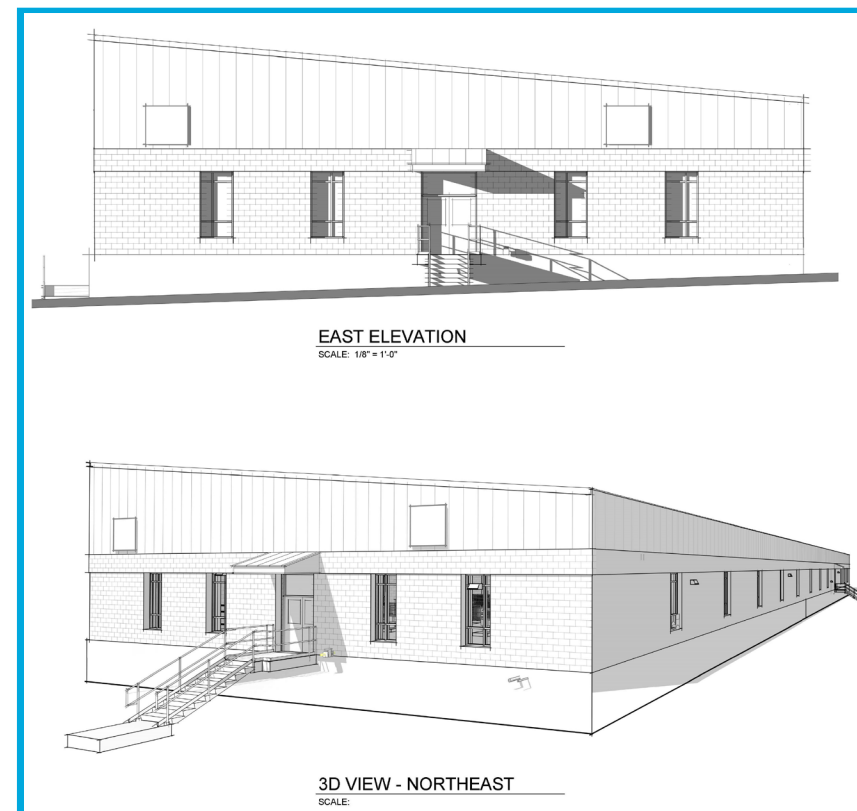
Mountain Dell Dam rehabilitation and restoration project

CIP GOALS

Initiate work on the wastewater collection system hydraulic model calibration study. This study will refine SLCDPU's hydraulic model to reflect actual flows identified with flow monitoring.

Complete construction of the 1800 North Sewer Realignment Project, with all three phases expected to be completed by 2026.

Scope and start the Citywide storm water master plan and surface flow study.



Develop intra and interdepartmental coordination tools to facilitate construction inspection and project delivery.

Aggressively recruit to fill open staffing vacancies within the capital program.

Architectural drawings of the planned City Creek Water Treatment Plant rebuild

Start phase two construction of the East-West Conveyance Line - Terminal Reservoir to 300 E project.

Continue construction of the City Creek Water Treatment Plant, scheduled for completion in 2027, and the New Water Reclamation Facility, with final construction completion scheduled in 2026.

ASSET MANAGEMENT

Asset management starts with an accurate inventory of all physical assets with the goal of managing the life cycle of each asset. This inventory includes pipes, valves, pumps, facilities, water treatment plants, dams, canals, reservoirs, and more. From the inventory, we set inspection, reassessment, rehabilitation, or replacement goals to ensure ongoing operations. These replacement strategies may include monitoring condition, planning for localized repairs, scheduling components for refurbishment, or planning for full replacement of facilities based upon risk management strategies. Our operations teams lead the effort of inventory and inspection, which is supported by GIS, engineering, and finance divisions. We assess and balance life cycle, scope, regulatory requirements, and community health and safety to develop accurate financial projections, condition and criticality scores. Our asset management team continuously assesses data to identify the condition of each asset, stating condition as the means and ability of the asset to perform its function. Criticality scores associated with each asset rank the importance of the function performed; this includes factoring in considerations such as essential facilities served, size of population serviced, safety, regulatory factors, and the role of the asset in maintaining public health and safety. By measuring this critical data, asset management identifies and proactively resolves system deficiencies at the lowest possible price point while maintaining reliable service for our customers.

2023 Asset Management Inventory Highlights:

686
miles

Sewer pipe
collection lines

431
miles

Storm drain
pipelines

42

Active sewer
pump stations

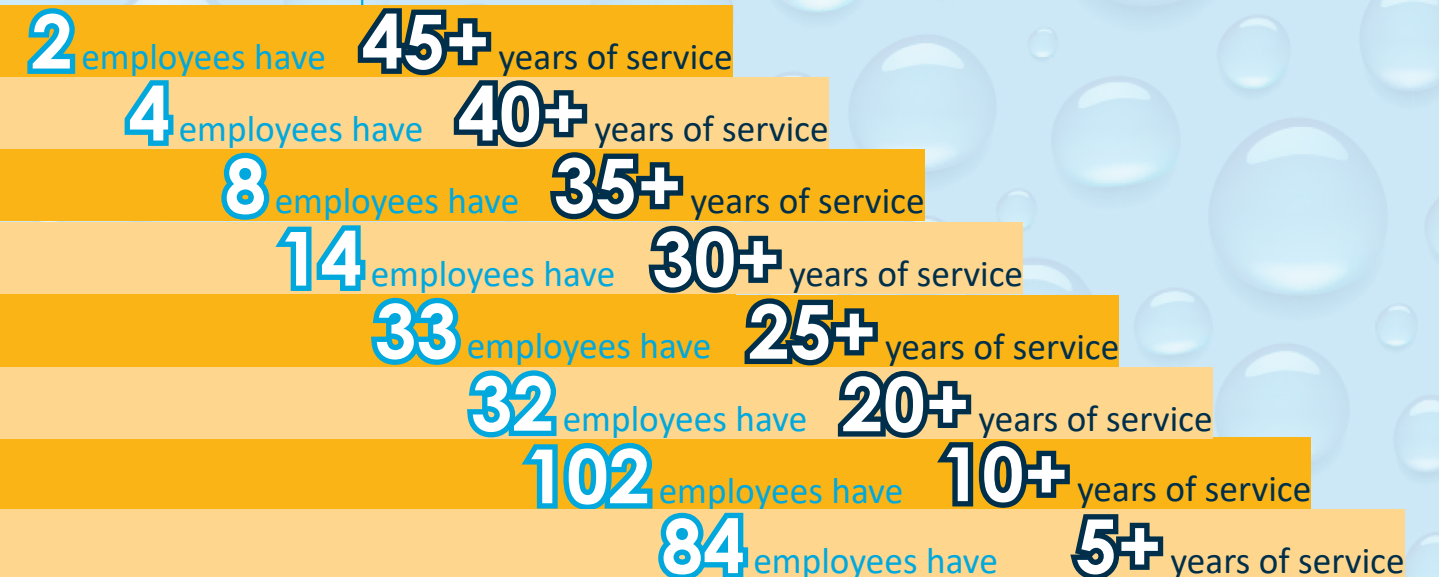
27

Active
stormwater
lift stations

Twin Lake during 2023 Dam Safety Inspections

OUR TEAM

As of 2023, we have over 400 regular, full-time employees; a number which increases incrementally throughout the year as we add seasonal and part-time staff. Those people collectively represent the diversity of Salt Lake City. Their variety of backgrounds, experiences, lifestyles, skill sets, and talents are the foundation for our rich organizational culture.



Retirements

KAT CHARLES retired in July 2023 after **41** years of service

RICHARD FLORES retired in December 2023 after **39** years of service

RICHARD WALKENHORST retired in July 2023 after **38** years of service

MARK FENTON retired in November 2022 after **37** years of service

SIDNEY TERRY retired in October 2022 after **25** years of service

ALEXANDER AKI retired in February 2023 after **14** years of service

WILLIAM VAN NOY retired in December 2022 after **5** years of service

DEVELOPMENT SERVICES

Development Services supports the public in several ways, including permitting any utility work, property management, records management, and standards/policy development. The Division consists of contracts

technicians, review engineers, records specialists, and property managers who ensure all federal, state, and city regulations are met for water, sewer, storm drain, and street lighting throughout Salt Lake City.

CUSTOMER INTERACTIONS

Phone Calls **23,027** Walk In Customers **2,479**

Development Services also liases with multiple City departments and other municipalities and jurisdictions concerning planning, permitting, and development coordination. One such partnership is with Salt Lake City Planning. Development Services collaborates with City planners on several petitions each week, recommending action on subdivision plats, lot consolidations, annexations, general plans, and roadway/alley vacations, among others. The Division is also represented on a Citywide team promoting the integration of water use and land use planning – accounting for water conservation as Salt Lake City grows.

1,604 Permits Reviewed
1,390 Private utility / Fiber reviews
160 Demolition permits

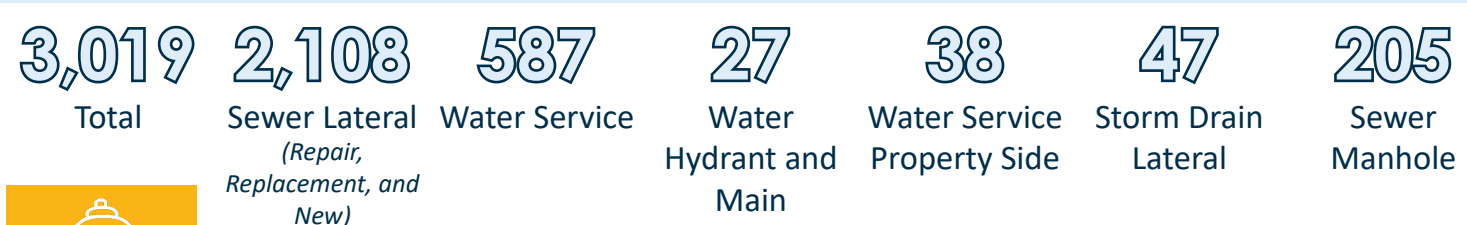
FISCAL YEAR 2023 PERMIT DISTRIBUTION



NEW DEVELOPMENT



WORK ORDERS GENERATED BY DEVELOPMENT SERVICES

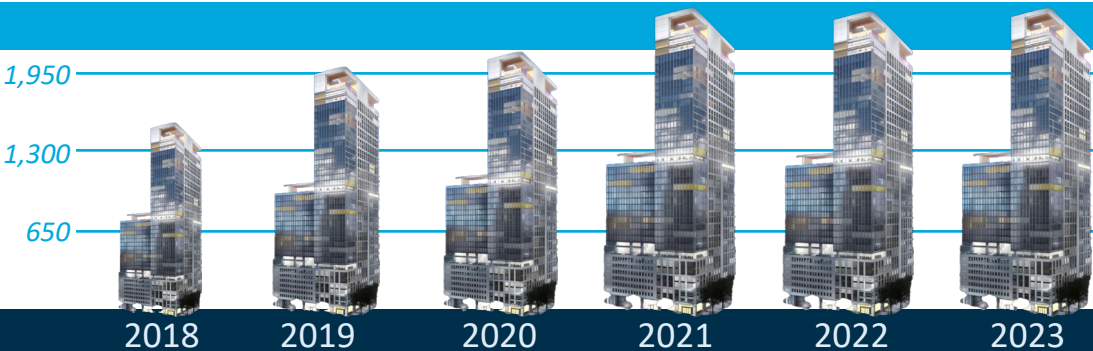


FIRE HYDRANTS

Hydrant Meter Permits **7** Fire Petitions Issued **134** New Fire Hydrants **42**

PERMIT TRENDS

Illustration at right demonstrates the upward trend in total permits reviewed over the past six years



Salt Lake City is experiencing rapid growth, and this is reflected in the development trends throughout the City. The City is seeing increased densification in new and redevelopments across our service area. With this increase in densification comes an elevated demand on existing utility infrastructure, resulting in off-site infrastructure upgrades to ensure capacity for growth. The Development Services team works together to see these projects through from initial permit application to the final Certificate of Occupancy.

RECORDS MANAGEMENT

The Records Management group is responsible for all scanning, indexing, and filing records for the Department, including all new and historical information housed at SLCDPU.

30,810 Records Scanned

PROPERTY MANAGEMENT

The property management group is responsible for purchasing of property, procurement of easements, issuing of land use agreements and water agreements to facilitate critical infrastructure projects, and purchasing of watershed lands for protection of water quality in our system. This team's role also includes management of existing lands for all facilities utilized to provide water, sewer, stormwater, and street lighting services.

Members of the Development Services team pictured during the 2023 employee appreciation luncheon



CUSTOMER SERVICE

Our Customer Service Team is dedicated to increasing efficiency while maintaining our high standards for professionalism and reliability. To better address Departmental resiliency, we standardized the job descriptions for all team members, which allows us more flexibility to accomodate fluctuations in our varied tasks.

AVERAGE CALLS
PER MONTH

8,437

LOST CALLS

Dropped to
less than

1%

Exceeding last year's goal of less
than 9%

Transitioning our team to a
4/10s schedule significantly
helped in meeting this goal.

SAVINGS

8,225
STOPS AVOIDED

We developed a
process by which
phone calls and
remote meter
access can replace
physical meter
access in some
cases. This results
in fuel savings and
increased employee
efficiency.

57%

successful collections

&

\$740,250

43,839

miles

35,696

lbs
carbon
emissions

PROJECT WATER ASSIST

\$4,352
donated

TO HELP

46

families
(January - August 2023)

METER READING & REPAIR

METER
READS

89,849

Total

15,789

Walking

21,962

Driving

52,098

Remote / FLX

Meter Repairs, Replacements, and Inspections

4,865

Repairs

128

Replaced

149

New Service Installs

39

Inspections

Inspections
include
Certificates of
Occupancy,
property-side
spot repairs,
and property-
side service line
repairs.

“

Your positive attitudes and
commitment to our City is
admirable.”

Council Member Chris Wharton
District 3

SAFETY

1,408

hours of in-person
employee health & safety
training completed

First Aid, CPR, AED
Confined Space
Entry

Trenching &
Shoring

Crane Rigger &
Signal Person

Difficult
Discussions
Forklift Operation

Situational
Awareness

Electrical Safety
Fall Protection

In addition to ensuring current health and safety training is arranged for and provided to employees, the Safety Department will continue to monitor the addition of new equipment, new work practices, and regulatory changes that could require new or additional employee training.

The Safety Department is also adding a second Coordinator, which will allow the Department to provide a greater safety presence and help with the development of new, or updates to existing, safety programs, including the Supervisor training program (when resumed). This will also allow the Safety Department to better utilize WorkDay to offer a wider variety of online training and improved recordkeeping.

COMMUNICATIONS & ENGAGEMENT

Our efforts help build trust and credibility, and advance the transparent, responsible, and accountable nature of government our residents know and deserve.

With our commitment to transparency and customer service, we work diligently to orchestrate a robust communication and engagement process for every major Public Utilities project.

One of our top priorities is creating and coordinating direct dialogue between the Utility and our diverse customer base. We strive to promote open, effective, and equitable participation in our Department’s decision-making process.

Over the past year, the Communications & Engagement Team has greatly expanded our presence on social media, in the news, and in the community educating the public and soliciting feedback. Here are just some of our many accomplishments in 2023:

\$6,172,724
publicity value

Increased media presence
**LOCALLY,
NATIONALLY,
INTERNATIONALLY**




Led Citywide crisis communications during
SPRING 2023 RUNOFF

**THE PIPELINE**

Instituted the Department’s monthly community newsletter

PLANNED DESIGNED EXECUTED

- communications for
- Rate increase
 - Drought surcharge
 - New Water Reclamation Facility Construction
 - City Creek Canyon Water Treatment Plant rebuild

Increased social media following		
	1,866 followers	183,509 impressions
	1,385 followers	144,184 impressions
	2,146 followers	308,196 impressions

Launched new
LOGO
and
STYLE GUIDE

Moving forward, the Communications & Engagement Team will continue creating an engagement guide to help determine the appropriate level of outreach needed for projects and programs. We will lead engagement and communications efforts regarding the upcoming Rate Study, and work to further amplify our reach publicly to keep the importance of protecting water, our greatest resource, in the forefront of discussion.



Participating in community events, like the 2023 Fire & Life Safety Fair pictured above, helped to build relationships throughout our service area



Collaboration with consultants enabled us to significantly increase awareness about Departmental projects and programs

I’m saving my water for the Great Salt Lake



GREAT SALT LAKE
SALT LAKE CITY



We all benefit from water conservation!
Learn more at www.slcc.gov/utilities/conservation/

An image from the Department’s ‘Saving My Water For...’ 2023 social media campaign

**Water Main Break**

We have been advised of a water main break and are working to repair it as quickly as possible.

We appreciate your patience!

Using social media to alert the public to water main breaks increased our reach

The October 2023 ‘Gear Up for City Creek’ event was a fun opportunity to connect with individuals who are passionate about Salt Lake City’s local treasure, City Creek Canyon.

REVENUES & EXPENDITURES

WATER UTILITY

Revenues: \$115,874,471

Expenditures: \$115,874,471

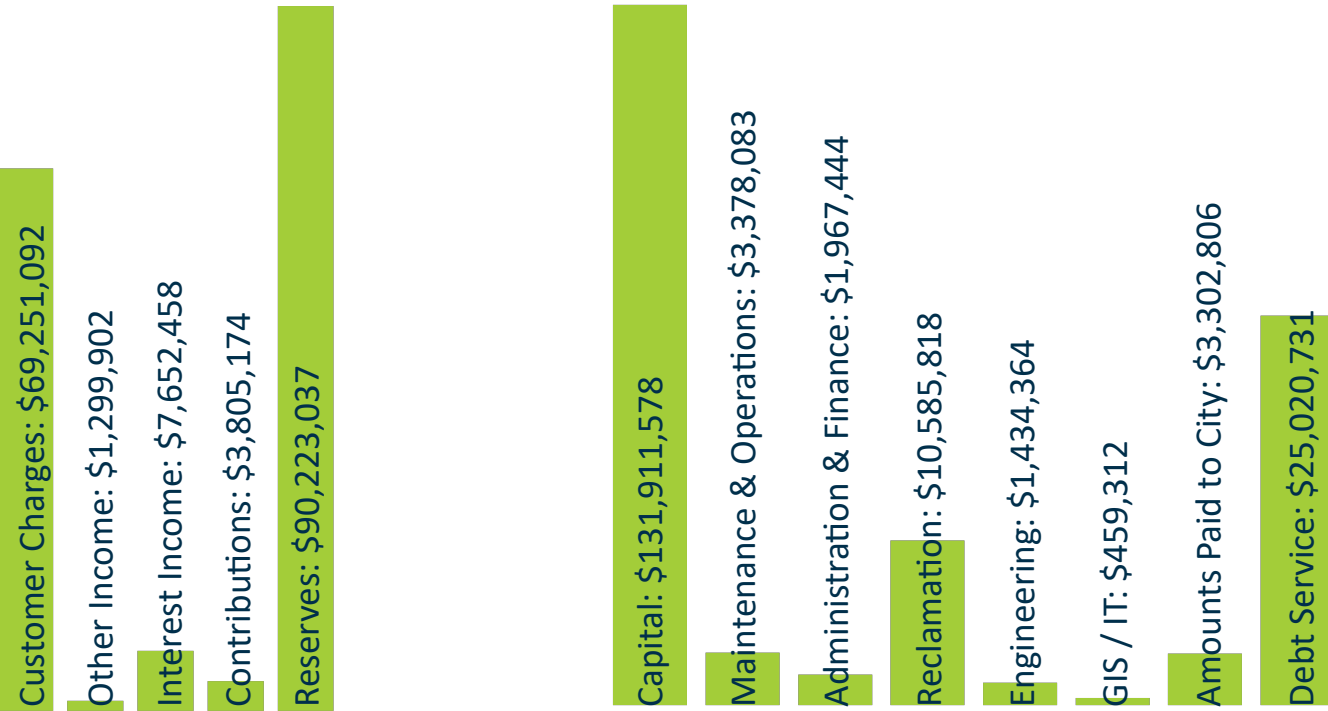


REVENUES & EXPENDITURES

WASTEWATER UTILITY

Revenues: \$178,060,136

Expenditures: \$178,060,136



STREET LIGHTING UTILITY

Revenues: \$4,424,762

Expenditures: \$4,424,762



STORMWATER UTILITY

Revenues: \$19,651,938

Expenditures: \$19,651,938



FINANCE

Our Finance staff continues to play an integral role in the development, planning, and implementation of the City's new Workday Enterprise Resource Planning (ERP) software. During 2023, Workday expanded to incorporate payroll and financials with significant impact on Departmental processes, such as banking and settlement, customer accounts, supplier contracts and invoices, projects, budgeting, and grants.

Next year, we expect continued involvement in the Workday rollout. Additionally, the Department will conduct a rate study, in which Finance staff will be heavily engaged.

WATER | SEWER | STORMWATER STREET LIGHTING UTILITIES

(Enterprise Funds of Salt Lake City Corporation)

Combined Statement of Revenues, Expenses, and Changes in Net Position

June 30, 2023 (with comparataive information for 2022)

	Water Utility	Sewer Utility	Stormwater Utility	Street Lighting Utility	Combined 2023	2022
OPERATING REVENUES						
Water sales	\$ 87,539,609	\$ -	\$ -	\$ -	\$ 87,539,609	\$ 73,636,959
Charges for sewer services	-	\$ 69,251,092	-	-	69,251,092	57,696,096
Stormwater fees	-	-	\$ 13,848,374	-	13,848,374	11,915,488
Streetlighting fees	-	-	-	\$ 4,288,019	4,288,019	4,264,579
Other	4,959,507	1,299,902	129,362	1,111	6,389,882	4,884,623
Total operating revenues	92,499,116	70,550,994	13,977,736	4,289,130	181,316,976	152,397,745
OPERATING EXPENSES						
Cost of sales and services	51,942,124	16,023,697	4,975,257	4,008,806	76,949,884	73,341,990
General and administrative	14,664,658	4,828,407	2,367,887	260,558	22,121,510	12,804,596
Depreciation	10,415,151	9,565,597	3,141,636	707,539	23,829,923	22,081,444
Total operating expenses	77,021,933	30,417,701	10,484,780	4,976,903	122,901,317	108,228,030
OPERATING INCOME (LOSS)	15,477,183	40,133,293	3,492,956	(687,773)	58,415,659	44,169,715
NON-OPERATING REVENUE (EXPENSE)						
Interest and financial charges	(5,205,874)	(17,739,809)	(535,591)	(78,204)	(23,559,478)	(10,260,209)
Investment income, net	4,453,174	7,652,458	799,872	171,632	13,077,136	(318,081)
Gain on disposition of property and equipment	401,332	48,297	38,521	-	488,150	349,788
Net nonoperating expense	(351,368)	(10,039,054)	302,802	93,428	(9,994,192)	(10,228,502)
Transfers in	300,000	-	2,000,000	-	2,300,000	154,443
Legal settlement	-	5,780,176	-	-	5,780,176	-
Capital contributions and grants	4,313,970	3,805,174	2,835,809	(36,000)	10,918,953	10,109,244
CHANGES IN NET POSITION	19,739,785	39,679,589	8,631,567	(630,345)	67,420,596	44,204,900
NET POSITION						
Beginning of the year	464,455,963	324,524,523	121,400,229	12,608,699	922,989,414	922,989,414
End of the year	\$ 484,195,748	\$ 364,204,112	\$ 130,031,796	\$ 11,978,354	\$ 990,410,010	\$ 967,194,314

Current year (2023) numbers are not yet audited

PUBLIC UTILITIES ADVISORY COMMITTEE



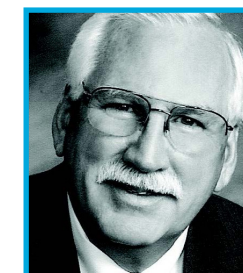
Dani Cepernich
Chair



Alex Lovell
Vice Chair



Ted Boyer



Tom Godfrey



Kathryn Floor



Roger Player

The Public Utilities Advisory Committee (PUAC) meets monthly to provide guidance and oversight on Departmental operations and budget, rate schedules, legislative issues, and policy decisions. PUAC meetings are open to the public. Members serve as volunteers for four-year terms. Representing SLCDPU rate payers across our service area, PUAC members are nominated by the Department Director and appointed by the Mayor and City Council.

This year, the PUAC bid farewell to three longstanding members. Kent Moore and Ted Wilson stepped down from their positions in May 2023. Lynn Hemingway stepped down in October 2023. We would like to thank them, and all of our PUAC members, for their service and dedication.

Newly appointed members not pictured:

Terry Marasco

Browne Sebright

Christopher Shope

Salt Lake City Administration

Erin Mendenhall	Mayor
Rachel Otto	Chief of Staff
Lindsey Nikola	Deputy Chief of Staff
Megan Yulli	Deputy Chief Administrative Officer
Katherine Lewis	City Attorney
Cindy Lou Trishman	City Recorder
Marina Scott	City Treasurer

Salt Lake City Council

Victoria Petro	District 1
Alejandro Puy	District 2
Chris Wharton	District 3
Ana Valdemoros	District 4
Darin Mano	District 5
Dan Dugan	District 6
Sarah Young	District 7

PUBLIC UTILITIES ADMINISTRATION



Deputy Director Jesse Stewart, Director Laura Briefer, Deputy Director Jason Brown (pictured left to right)

In 2023:

Following Deputy Director Marian Rice's departure, Jason Brown was promoted from Chief Engineer to Deputy Director.

Jason Draper was promoted from Deputy Chief Engineer to Chief Engineer.

With input from the Administration and workforce as a whole, the Department published a new version of our Mission Statement and Values.

“It is our mission to serve and safeguard our community and environment by equitably, sustainably, and efficiently providing top-quality water, wastewater, stormwater, and street lighting services.”

SLCDPU Mission Statement

We advised City leadership regarding water conservation, Great Salt Lake issues, water rights, and more. Beyond that, we also participated in numerous statewide policy committees and studies related to Utah Lake and Great Salt Lake.

Public engagement remained a focus for projects and initiatives. We engaged with community stakeholders and built many strong relationships, while increasing positive interactions throughout our service area.

Goals

We will continue to seek and apply for alternative financing opportunities, such as grants, to fund the projects necessary to continue providing the best possible service throughout our community.

We continue to address succession planning and staff retention.

Our long-term planning top priorities range from addressing water supply and demand, to identifying financial strategies which support large and small projects in service of future generations.

Completing our Watershed Management Plan is critical to providing a structure in which we can ensure the protection of our source waters today, tomorrow, and for the future.

We will be conducting a rate study for Water, Sewer, and Stormwater utilities in keeping with the intent to evaluate rates roughly every five years.

Administration



Laura Briefer
Director



Jesse Stewart
Deputy Director



Jason Brown
Deputy Director



Lisa Taruffelli
Finance Administrator



Jason Draper
Chief Engineer



Teresa Gray
Water Quality
& Treatment
Administrator



Jeffrey Grimsdell
Operations &
Maintenance
Superintendent



Wes Ing
Safety Program
Manager



Mark Kittrell
Deputy City
Attorney



Holly Lopez
Public Policy &
Affairs Director



Chloe Morroni
Communications
& Engagement
Manager



Tamara Wambeam
GIS/IT
Administrator



Jamey West
Water
Reclamation
Administrator



Pictured at left, left to right: Mayor Mendenhall, Laura Briefer, Salt Lake County Emergency Manager Clint Mecham, Salt Lake City Emergency Management Division Chief Richard Boden, and Salt Lake City Council Member Dan Dugan (District 6) participate in a press conference during spring runoff

- Apgar, B. (2023, April 15). A top SLC river watchdog was brewing coffee when he noticed the flooding — outside his front door. Retrieved from The Salt Lake Tribune: <https://www.sltrib.com/news/2023/04/15/slc-spring-morning-coffee-with/>
- Lofton, S. (2023, April 23). Sugar House Park water could rise as high as four feet, closed to vehicles. Retrieved from KSLTV.com: <https://ksltv.com/542929/sugar-house-park-water-could-rise-as-high-as-four-feet-closed-to-vehicles/>
- Porter, M. (2023, April 12). Voluntary evacuation orders lifted in Salt Lake City neighborhood. Retrieved from Fox13Now.com: <https://www.fox13now.com/news/local-news/flood-advisory-issued-for-areas-of-salt-lake-city-as-flooding-closes-streets>
- Rascon, D. (2023, May 3). Salt Lake City crews trade in desk work for 24/7 flood watch. Retrieved from KSLTV.com: <https://ksltv.com/546920/salt-lake-city-crews-trade-in-desk-work-for-24-7-flood-watch/>
- Tavss, J. (2023, April 10). Salt Lake City better prepared for flooding than in 1983, mayor insists. Retrieved from Fox13Now.com: <https://www.fox13now.com/news/local-news/salt-lake-city-better-prepared-for-flooding-than-in-1983-mayor-insists>

Pictured at right, left to right: SLCDPU employees Jesse Killinger, Matthew Hendrix, Greg Archuleta, and Patrick Nelson attend the November 2023 Salt Lake County Watershed Symposium



Pictured above, left to right: Laura Briefer recognizes SLCDPU Stormwater Maintenance Supervisor Waylon Blackburn, Manager Scott Swanger, and Supervisor James Newman during a Public Utilities Advisory Committee meeting



1530 South West Temple
Salt Lake City, UT 84115

www.SLC.Gov/Utilities



@SLCPU



@Salt Lake City
Department of Public
Utilities



@SLCPU