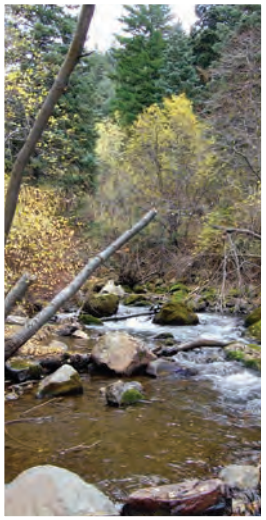
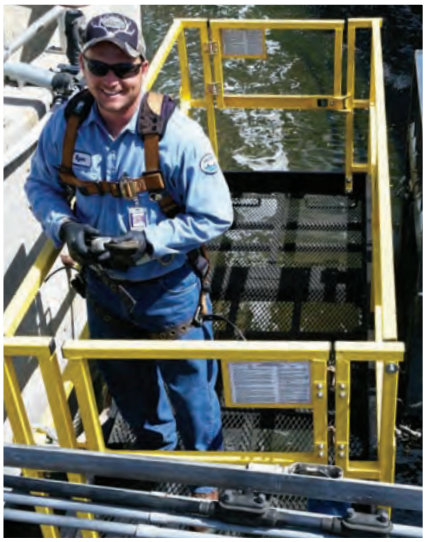
SALT LAKE CITY PUBLIC UTILITIES ANNUAL REPORT

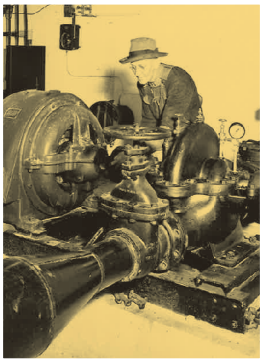






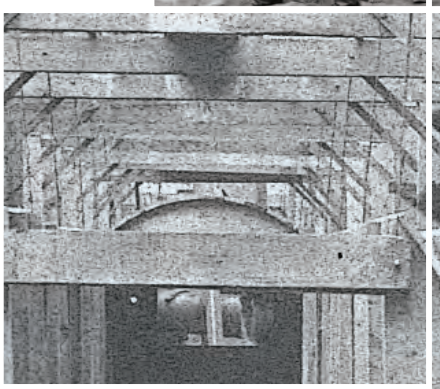






2018

DRINKING WATER
STORMWATER
WASTEWATER
STREET LIGHTS



DIRECTOR'S MESSAGE

Building on our past to inform our future.


Laura Briefer, *Director*

When pioneers entered the Salt Lake Valley in 1847, they almost immediately took to building a dam across City Creek, and to diverting the water to newly plowed farmland.

So began the legacy of Salt Lake City's resource stewardship.

Settlers drew a hard line on protecting their source waters while meeting consumption needs. Early City leaders also understood their role in safeguarding public health. In 1851, the Salt Lake City Council passed the first ordinances to protect drinking water: *"Be it ordained by the City Council of Great Salt Lake City that no person or persons shall be allowed to build cow yards, privies, or deposit any filthy substance on the banks of the streams running through this City so as to affect the water thereof."*

Salt Lake City Waterworks, the forerunner of this Department, was formed in 1876. Over the next 140 years, Salt Lake City Department of Public Utilities became the steward of water supplies for more than 350,000 people, took on the responsibility to protect public health and the environment through wastewater treatment and storm water systems, and transformed street lighting into a self-sustaining utility. Protecting public health and the environment, and planning for the growth and prosperity of our community is at the root of our legacy and public ethic.

As 2018 draws to a close, I look back on more than a century of our City's public utilities management with awe and a deep sense of responsibility and direction. Our 400-plus employees approach their jobs knowing the rich legacy of this Department and strive to do their best work every day in a rapidly changing world. We are committed to supporting and building the public trust. This means everything to SLCDPU, and to our City leadership.

If the past truly is prologue, our team is excited to take on the future. In this Annual Report, you will see powerful references to our Department's history, and how it informs our current and future programs and projects.

For example:

- The planning, designing, and building of a new water reclamation facility that will serve for many decades.
- The undertaking and completion of several major infrastructure improvements for water treatment and distribution, sanitary sewer collection, and stormwater drainage.
- Significantly updated master plans for our water supplies, watershed, street lighting, and stormwater systems. Each update will tackle the contemporary challenges of population growth and climate change.
- A continuing and robust commitment to source water protections in our Wasatch canyons, including support for well-informed legislation and public policy.

As Director, I look ahead and embrace opportunities and the privilege of guiding our Department into a complex but hopeful future. Thank you for joining us in building on our great legacy.

Laura Briefer, MPA

DRINKING WATER

Population served:
352,000

Service area:
141 sq. miles

Gallons of water delivered:
3.9 billion

Service connections:
91,545

WATER SUPPLY SOURCES:

Ground water:
12.7%

Surface water:
33.6%

Purchased water:
53.7%

STREAM SOURCES

LCC, BCC, Parleys, City Creek:
56%

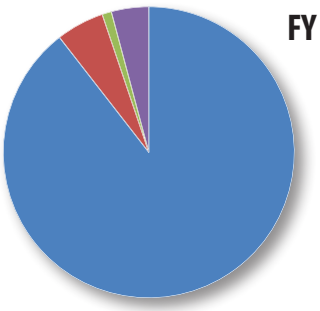
Deer Creek/CUP/Other:
34.5%

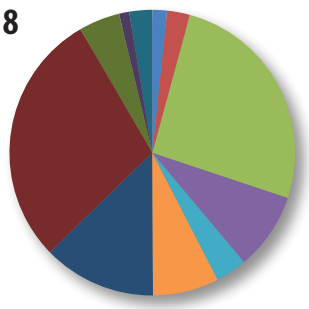
Groundwater and Springs:
9.5%

We vigorously protect and manage our surface water and groundwater springs and wells to provide 352,000 people with the highest-quality water available. Whether treated at our three City-owned facilities, pumped from groundwater wells, or purchased from wholesale suppliers, our drinking water consistently meets or exceeds all state and federal clean water regulations.

This year, for example, we submitted lead and copper samples from our drinking water, as required every three years, to the Environmental Protection Agency (EPA) to comply with the agency's Lead and Copper Rule. Although we removed lead pipes from our drinking water distribution system many years ago, we do not control materials used in household plumbing components. Due to the quality of our water, the 90th percentile of the samples collected from households were well below the EPA's Action Level. Going forward, we will perform vital upgrades to our drinking water infrastructure. Parleys Water Treatment Plant is scheduled for an electrical upgrade and a rebuild of the facility's front end. The City Creek Water Treatment Plant is in the process of developing a master plan. The Big Cottonwood Water Treatment Plant will be substantially redesigned, with new sedimentation basins and chemical feeds.

FY 17-18





Water Utility Revenue

Water Sales	71,647,2768
Other Income	4,267,472
Interest Income	831,749
Contributions	3,325,006
Total	**$80,071,503**

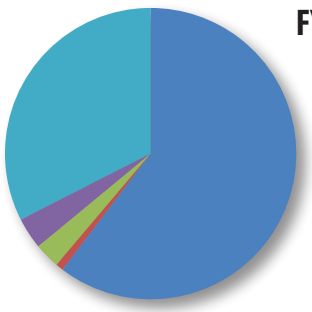
Water Utility Expenses

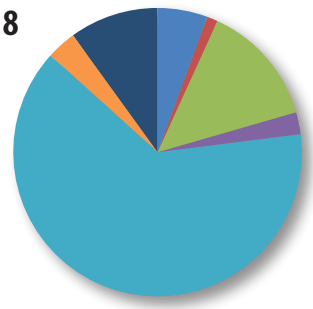
Sources of Supply	$1,326,916
Power & Pumping	2,058,983
Purification	20,736,195
MWDSLS Assessment	7,021,892
Shops & Maintenance	2,834,691
Administration & Finance	5,999,117
Trans. & Distribution	10,242,119
Capital	23,122,274
Payment to City	3,734,466
Debt Service	918,809
Reserves	2,079,041
Total	**$80,071,503**

WASTEWATER

Our team at the Water Reclamation Facility manages to keep one foot in the present while stretching toward the future—2025, to be exact. That is the year our new, state-of-the-art treatment plant must be open and meeting stricter environmental regulations. Meanwhile, we continue at the current (and only) plant to manage and monitor the sewage treatment process for residential, commercial, and industrial customers. For the past 25 years, our facility has distinguished itself with 100 percent state and federal regulatory compliance. As the plant nears the end of its life, the commitment to meeting or exceeding all regulations will continue. This year, planning and design for the new facility was in full gear. The project team met regularly with principal contractors—lead engineers, architects, public outreach specialists and more—to meet important early timelines. Grasping the challenge of keeping the current facility running, the facility team is also learning new treatment processes and plant management that will be more technology-based. Weekly classes to update staff on new technology, as well as recruitment of additional employees with mechanical aptitude is a key goal in coming years. In 2019, architectural design for the new plant will be finalized, as well as a robust public engagement plan to include and involve the community in our commitment to the new facility as a fully functional, educational, safe, and attractive community asset.

FY 17-18





Wastewater Utility Revenue

Customer Billing	$ 33,620,751
Other Income	468,277
Interest Income	1,579,221
Contributions	1,949,869
Reserves	18,104,812
Total	**$ 55,722,930**

Wastewater Utility Expenses

Collections	$ 3,120,448
Pumping	674,827
Reclamation	7,646,925
Admin. & Finance	1,373,305
Capital	35,492,478
Payment to City	1,860,670
Debt Service	5,554,277
Total	**$55,722,930**

Gallons of raw sewage treated daily:
31.3 million

Sanitary sewer lift stations:
34

Sewer main lines cleaned:
1,602,448 FEET

Replacement pipe installed:
6.17 MILES

Biosolids treated for reuse:
4,370 TONS

Megawatt hours generated by methane gas creation:
5,469,489 kWh

STORMWATER

Detention basins cleaned:

64

Miles of gutter cleaned:

45

Cubic feet of floatable debris prevented from entering the Jordan River:

512

Tons of debris cleaned from SLC storm drains and ditches:

3,086

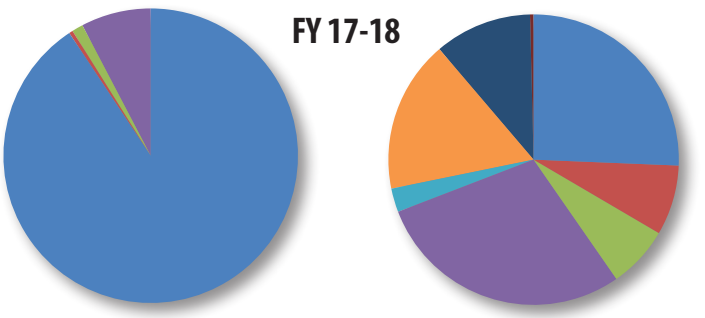
Our stormwater utility keeps the community's drainage conveyances clean and monitors and maintains the quality of stormwater discharges. Our maintenance team cleans the entire drainage system on a five-year cycle. With 343 miles of storm drain pipe in the City, our crews cleaned 107 miles this year. They also cleaned inlets, ditches, detention basins and gutters, poured concrete for curbs and gutters, and fabricated and welded grates. A drier than normal summer was helpful to the team this year, providing an opportunity to clean the conveyance system and stay ahead of heavy rains.

Our stormwater quality team routinely collects samples from the stormwater system to comply with federal and state clean water regulations and works actively with the Salt Lake County Stormwater Coalition to educate the public on keeping hazardous materials from entering the storm drain system. Each year, Stormwater employees visit the Water Quality Fair at Hogle Zoo with our vactor truck and interactive displays to teach school children the water cycle and the importance of clean urban runoff.

In the coming year a new stormwater management plan will be underway. The plan will incorporate the effects of climate change by addressing stresses on the storm drainage system as the region experiences an increase in intense storm and flash flood events.

Miles of storm drain pipe cleaned:	Inlets and boxes cleaned:	Miles of ditches cleaned:
107	**23,337**	**4**

FY 17-18



Stormwater Utility Revenue

Customer Billing	$	8,508,507
Other Income		38,889
Interest Income		115,773
Contributions		720,931
Total	**$**	**9,384,100**

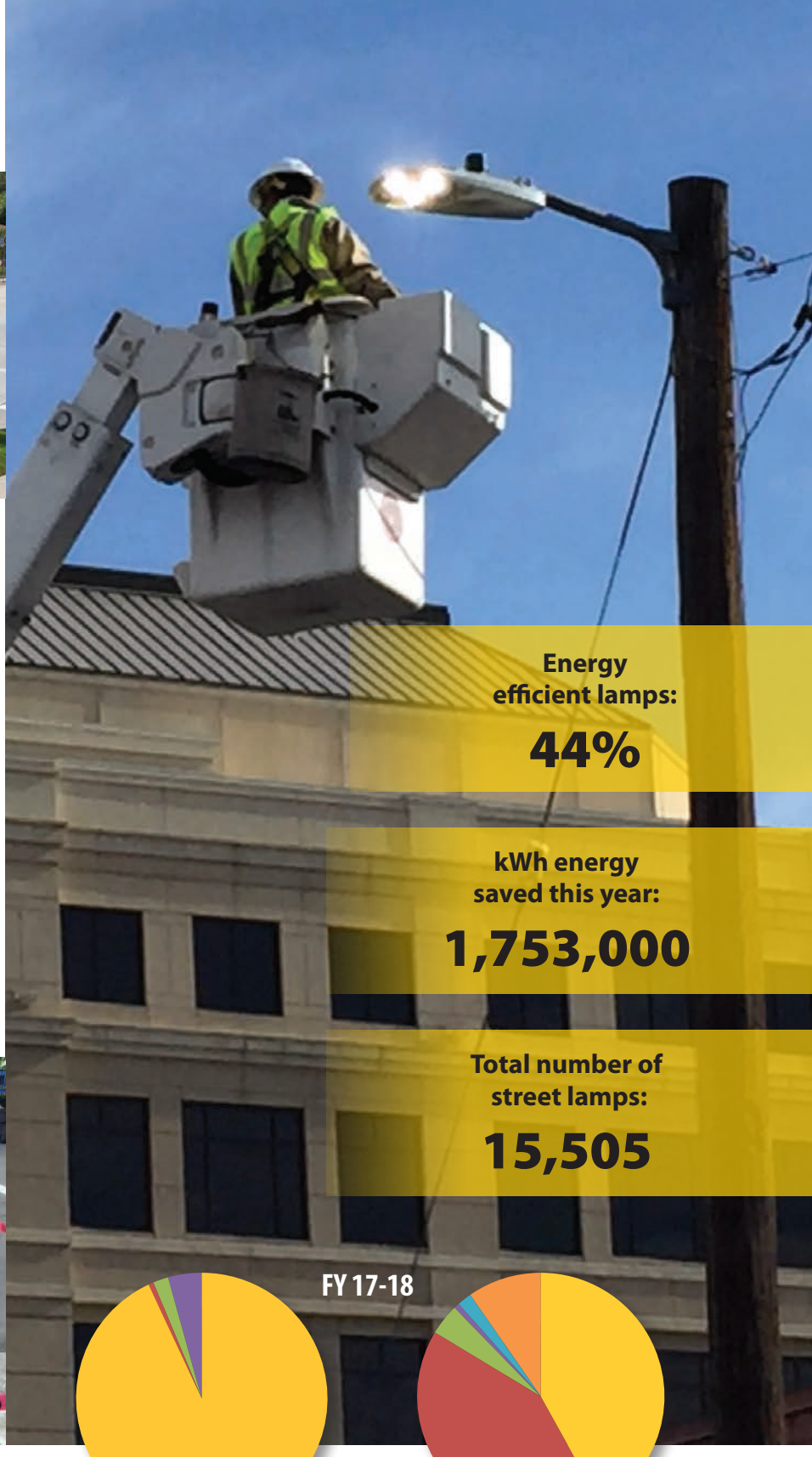
Stormwater Utility Expenses

Collections	$	2,407.070
Engineering		731,135
Water Quality		647,453
Capital		2,703,504
Administration		247,631
Payment to City		1,592,651
Debt Service		1,017,494
Reserves		37,162
Total	**$**	**9,384,100**

STREET LIGHTING

Street Lighting has changed 64 percent of lamps to light emitting diode (LED) and induction lighting and is on goal to meet the City's metric of converting the entire inventory to high-energy-efficient lighting by 2023. One of the most exciting efforts underway is a pilot program to test smart controls for lighting. Managers will be able to operate these controls from a laptop or smart phone, enabling them to instantly switch lights off and on, control brightness, and to generate maintenance reports more rapidly. Smart controls will support greater energy efficiency and more customized lighting levels for individual neighborhoods. Our street lighting team is currently running seven smart control pilot programs across the City. In addition, public

engagement has begun on a new street lighting master plan, which will begin in early 2019. The plan will establish standards and uniformity, helping to inform decisions on how to provide lighting levels that support public safety while also addressing the cultural and aesthetic characterstics of City neighborhoods.



Energy efficient lamps:

44%

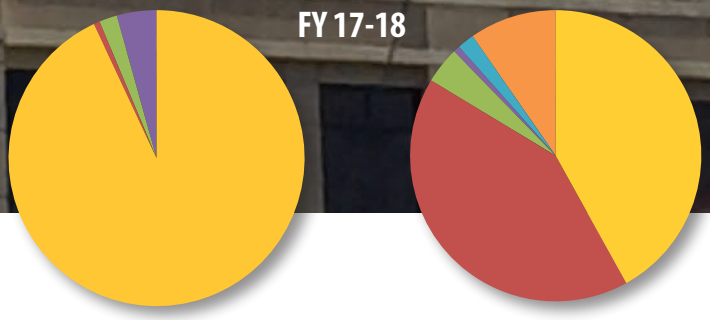
kWh energy saved this year:

1,753,000

Total number of street lamps:

15,505

FY 17-18



Street Lighting Utility Revenue

Customer Billing	$ 4,198,227
Other Income	29,630
Interest Income	88,339
Contributions	195,808
Total	**$ 4,512,004**

Street Lighting Utility Expenses

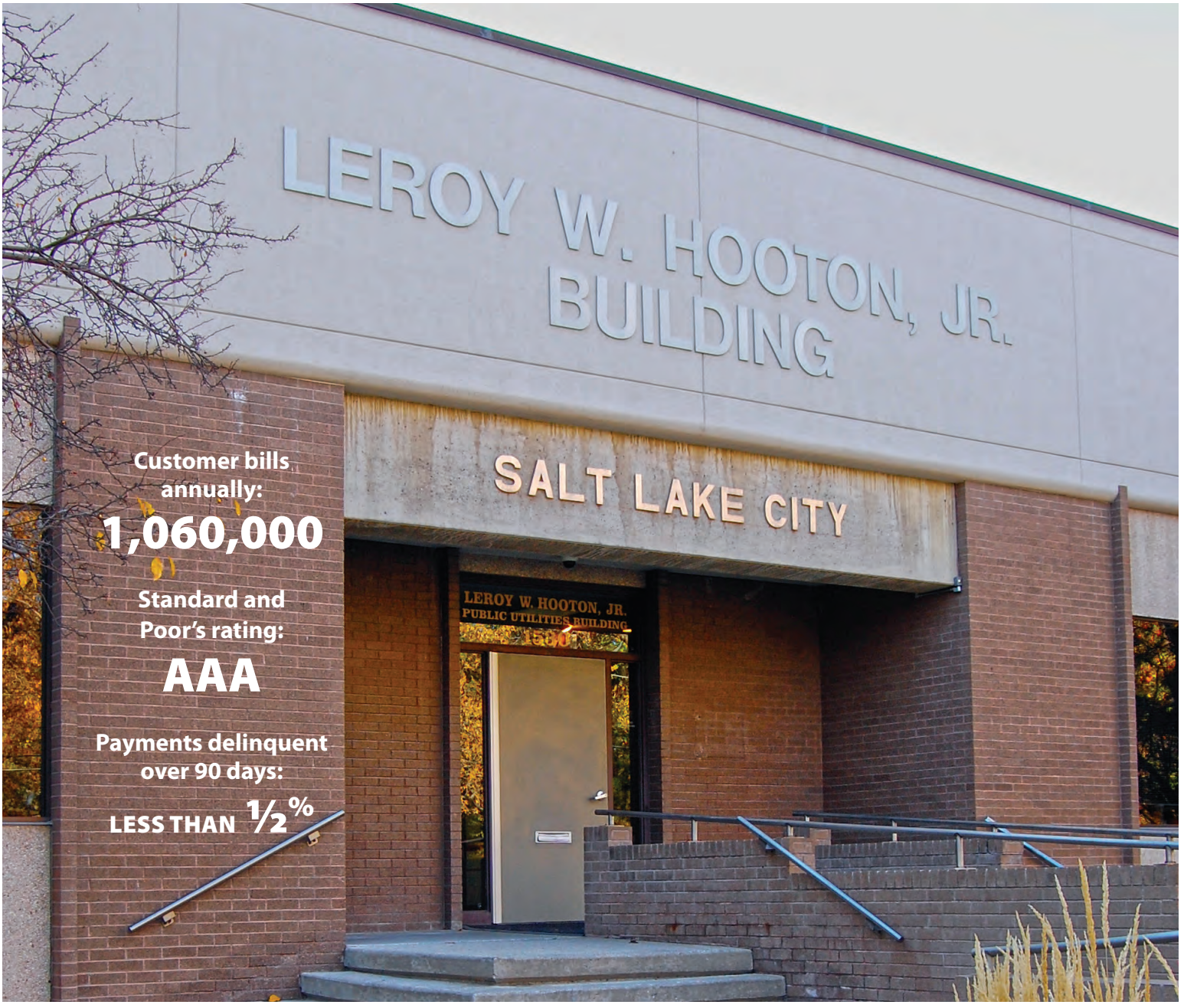
Maintenance	$ 1,892,028
Capital	1,882,284
Admin. & Finance	183,064
Payment to City	33,567
Debt Service	85,048
Reserves	436,013
Total	**$4,512,004**

ADMINISTRATION

The Administration Division provides direction and vision for each of our enterprise utilities: Drinking Water; Stormwater; Wastewater; and Street Lighting. Policy, training, safety, media relations and community outreach, and application of both human and financial resources all live within Administration. A top priority is succession planning. Of 400 SLCPU employees, 65 of them hold key positions and are likely to retire within five years. We want to retain strong institutional knowledge and to help our employees grow as we make these important personnel transitions. Our dedicated employees, along with protecting Salt Lake City's water resources, are at the foundation of our "can do" approach to providing and managing excellent utility service.

FINANCE

The Finance Division provides Department and City administrators, managers, and decision makers with reliable financial information to help manage and finance operations and capital improvements projects. Additionally, Finance performs and monitors our account-related processes and systems, which include meter reading, billing, and customer service. Finance processes payroll, payments for vendor and contractor invoices, and prepares and coordinates budgets, financial analysis, statistical analysis, auditing, general accounting, and financial compliance for the Department.



DEVELOPMENT SERVICES

With the continued boom in building, our Development Services group kept busy in 2018 working to maintain federal and state regulations, City codes and ordinances, and our high internal standards for water, sewer, and stormwater systems and main connections. This team interacts with other City departments and jurisdictions on planning, permitting and development, and connects developers with our own departmental groups—GIS/IT, billing, customer service, stormwater quality, pretreatment, backflow prevention, maintenance and operations, and construction inspection.

CUSTOMER SERVICE

It was a busy and productive year for our Customer Service group, as the team continued to support rate payers through several platforms—walk-in visits, telephone calls, email, and with online bill pay. Generating trust with customers is a priority for this team. They resolve thousands of questions and respond to service challenges each year. The group is also trained to handle delinquent accounts with skill and will go the extra mile to reach out to a customer whose account shows unusually high water use or potential meter malfunctions. In 2018, Customer Service added two new representatives to the team and field technicians transitioned to an online collection and investigation process. Using electronic tablets, these representatives can take payments, process credit cards, make notes about payment arrangements, document meter readings and reported leaks, and submit work orders for repairs.

ASSET MANAGEMENT

Miles of sewer pipe and collection lines:

655

Storage reservoirs:

7

SLCDPU-owned water treatment plants:

3

Stormwater lift stations:

27

Accurate inventory and analysis of all physical assets are keys to our daily operations and long-term planning. Our Asset Management list is wide-ranging: pipes, valves, pumps, lift stations, water treatment plants, sewer and water lines, reservoirs and much more. Our Asset Management team continually identifies the condition and criticality of each asset. Condition means the ability of an asset to perform its function; criticality ranks the importance of the function performed. By measuring this data, Asset Management identifies and solves system deficiencies, as well as stays on schedule with regular inspections, cleaning, and maintenance. Finally, effective Asset Management provides foundational information to help us plan future projects in a timely and cost-efficient way. This builds resilience by preventing system failure and supports us in safeguarding public health and safety.

CAPITAL IMPROVEMENT

This is an historically significant time for the capital improvement work group, with a hefty schedule of new projects and upgrades facing them this year and beyond. Growth throughout our service area is requiring major capacity upgrades for water treatment and distribution and in the sanitary sewer collection system. For instance, all three of the City-owned water treatment plants have undergone or will soon experience long-planned improvements. Along a busy stretch of 1300 East in Sugar House, century-old sewer and water lines were replaced. Contractors are in place and public outreach has begun on two large water transmission lines that traverse the city. Work continues on a new wastewater treatment facility. The capital improvement team has grown in recent years, as have training opportunities to encourage state and national-level leadership among our engineers. Modernizing project management tools is a priority in keeping pace with this planning and construction boom—acquisition of cloud-based software and handheld devices is helping this team meet challenges with smarter and streamlined solutions.

VALUE OF CAPITAL IMPROVEMENT PROJECTS

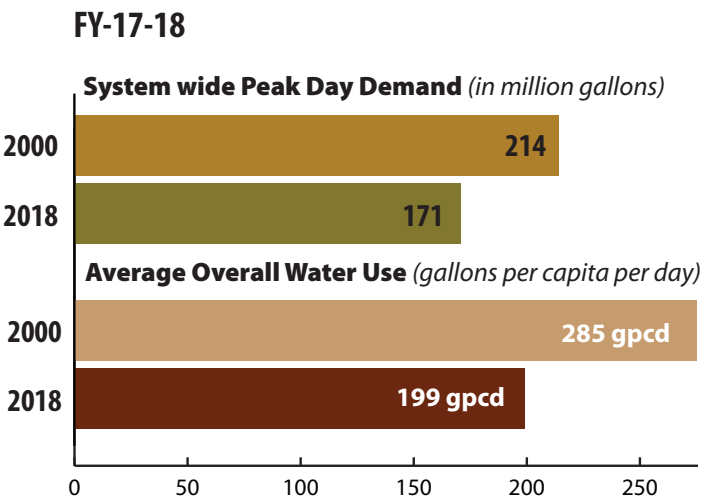
Water: $23,122,274

Sewer: $35,492,478

Capital: $1,882,284

Stormwater: $2,703,504

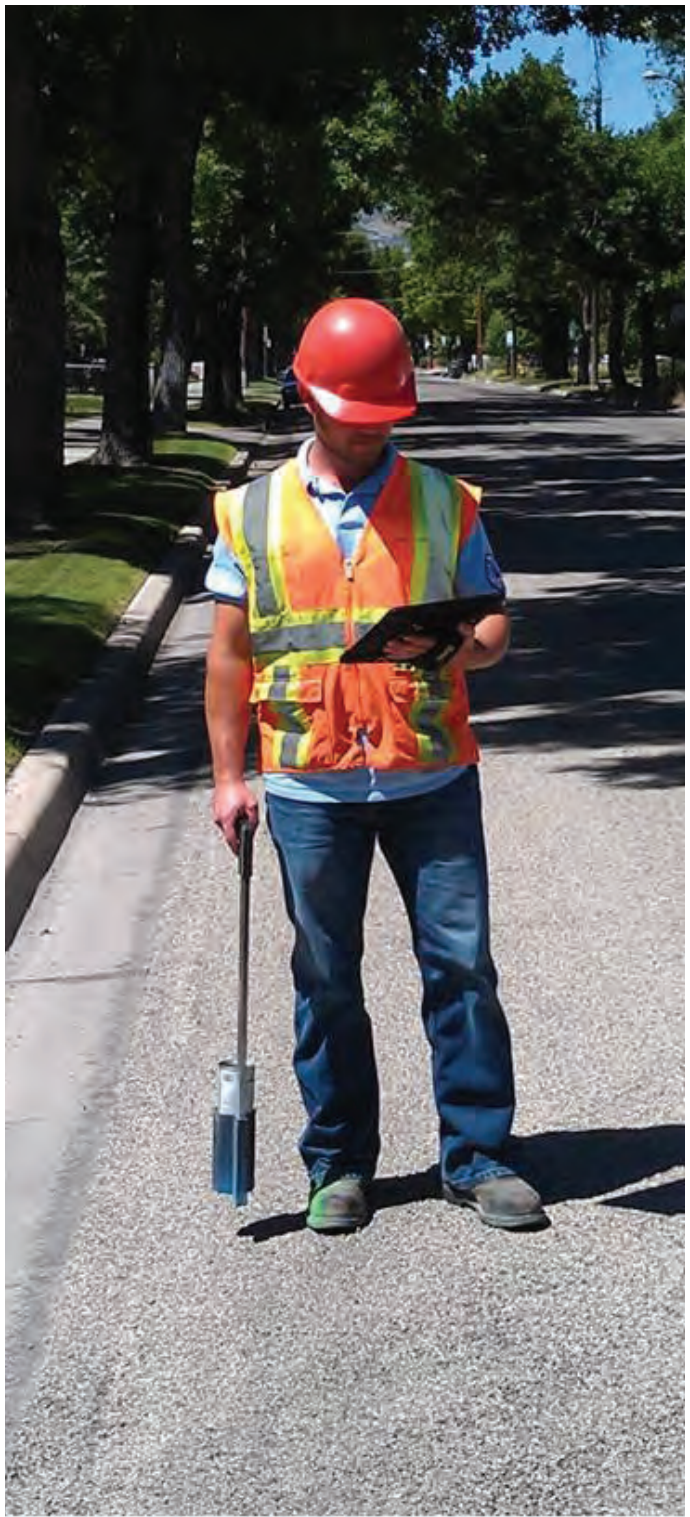
WATER CONSERVATION



An important aspect of our ability to develop and maintain a resilient, sustainable water supply is the integrated planning of water supply, watershed management and protection, demand management, drought planning, and climate change. For example, updates to the 2003 Water Shortage Contingency Plan and the 2014 Water Conservation Master Plan are informing and being informed by concurrent updates to the Major Conveyance Study and the Watershed Master Plan. Additionally, our latest rate study and current climate research also provide critical perspectives and insights into our conservation and drought planning. Other programs this year, with Utah State University, include the Golf Turf Study and improved Water Check program applications and reporting. Work continues on WaterMAPS, another joint project with USU, and with Radian, development of the Commercial/ Industrial Water Use Analytics Tool. During Water Week, we hosted students from a variety of grades in a day of science, planning, and poetry at our 900 South Constructed Wetland.

GIS/IT

Our GIS/IT group is all about helping the Public Utilities team work smarter with useful technology. Each year, they add new mobile and network tools to the Department's toolbox. In 2018, GIS/IT upgraded our billing system software to input more small and large meter information and tied this information into our work order system. This allows our employees in the field to add, replace or update meters and work orders. We developed a high-tech, one call Blue Stakes software that pulls information directly from the one call center into our own program. We now have full access to these tickets and our GIS system in the same program and it is stored on our network for years. These programs are now paperless, saving time and money. Distribution, Engineering, Customer Service, GIS, and Maintenance teams now have full access to live GIS/IT data in the field, where they see current information regarding our system at any time. If a change is made they see it live. GIS/IT has kept pace with a growing number of main and service line replacements in water, sewer, and stormwater. They have also begun developing network upgrades for the new Water Reclamation Facility.



Blue Stakes requests:
38,736

Work orders processed:
21,381

SLC mobile reports:
5,947

Flow and capacity models developed:
38,736

Feet of new pipe surveyed:
78,125

Maps created:
4,379

SAFETY

Vehicles in Public Utilities fleet:

320

On-the-job miles:

1,515,228

Average miles driven per vehicle:

5,373

Hours completed in LMS training:

2,535

Our Safety program educates all employees on the responsibility we have to ourselves, our co-workers, and to the greater community in conducting our work safely. This includes training in first aid and CPR, how to work safely in confined spaces and in trenches and while excavating. Public Utilities employees are trained in defensive driving, the use of protective clothing and gear, flagger education, traffic control and more. This year, mindful of a national increase in workplace violence, the Department held three "active shooter" trainings. This past year also marked full immersion in the City's Learning Management System (LMS). The online employee education system includes many required worker health and safety courses, as well as modules dedicated to career development. LMS courses allow employees to schedule training as they choose (within a certain time window) and has potential to streamline training time, cost, and employee productivity.

WATERSHED

Salt Lake City's first leaders enacted water quality ordinances in 1851, just four years after entering the Valley. By 1907, the City Council had acquired most of City Creek Canyon and substantial acreage in Emigration, Red Butte, and Parleys canyons—setting in motion our long history of robust source water protections. Our Watershed program now stewards 190 square miles in seven canyons of the Central Wasatch.

It was an eventful year. The 2018 Utah Legislature proposed changes in extra-territorial jurisdiction and other key components of the City's watershed management policies. Action was delayed, and the bills went to interim study, where they were further vetted for consideration in the 2019 session. We pushed forward on the Watershed Management Plan Update, selecting firms to refresh our "Keep It Pure" campaign with emphasis on the critical connection between watershed protection and preserving public health. Public outreach on the Management Plan will ramp up in early 2019. The updated document will address increasing concerns of massive recreational use, climate change, and wildfire in the watershed.

Additionally, our Watershed team replaced restrooms in several heavily visited recreation sites in the Wasatch, including Donut Falls, Guardsman Pass, and Little Mountain. At Little Dell Reservoir, we added an ADA-compliant ramp to aid people with disabilities in launching watercraft, as well as wider parking stalls. At Silver Lake, one of our watershed's most popular recreation sites, new restrooms were opened at the Education Center.

Drinking water sourced in Wasatch Watershed:

50-60%

City Creek first diverted for water supply:

1847

Acres purchased for protection (since 1989)

31,529

Cecret Lake Dam, built in the '20s,

UPDATED: 2018

PRETREATMENT

The Pretreatment Program is vital in ensuring commercial and industrial discharges into the sanitary sewer system are compatible for treatment at the City's Water Reclamation Facility. These discharges must comply with federal, state, and city pollutant requirements, and Pretreatment monitors for that compliance. This year, Pretreatment has worked to keep up with demands of a robust and expanding economy, including implementation of the EPA's new Dental Amalgam Program. This program oversees the collection and disposal of dental amalgam and helps to prevent the release of mercury and other potential toxins in the sewer system. Going forward, Pretreatment is evaluating the buildup of fats, oils, and grease (FOG), in the sewer system. Butter, lard, vegetable oils, and fats and grease from meats and nuts are commonly used in food preparation. When discharged into the sewer system, these substances can build up on conveyance pipelines, restricting flow. Pretreatment is working with commercial and industrial users to reduce the discharge of FOG into the sanitary sewer system.

Companies evaluated for compliance:

150

Pollution compliance inspections:

110

Responses to spills and illegal discharges:

50

COMMUNICATION AND ENGAGEMENT

Top Tweet:
21,000 IMPRESSIONS
(Lake Mary story, April 2018)

Facebook followers:
651

Facebook page "likes"
644

Public Utilities added a Communication and Engagement program in July 2017. The program supports both internal and external communication, including regular interaction with local, national, and trade media, City departments and divisions, emergency and disaster support, public relations, social media presence, and personal outreach across the community. As the Department continues its mission and scope adding a record number of large-scale capital projects (updates to water treatment plants, a new water reclamation facility, for example), early and regular public engagement is essential in educating and building trust with the community. The Department now has a growing communication presence on social media platforms Facebook and Twitter, as well as an evolving page on the City's new website: **https://www.slc.gov/utilities/**

Engagement will continue in 2019 with outreach around new management plans for Stormwater, Streetlighting, an updated Watershed Management Plan, and numerous high-profile utilities projects across our service area.

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES
WATER, SEWER, STORMWATER, AND STREET LIGHTING

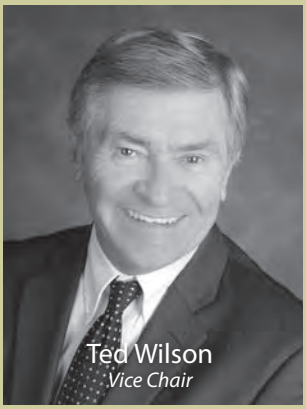
Combined Statement of Revenues, Expenses, and Changes in Net Position for the Enterprise Funds ofSalt Lake City Department of Public Utilities.

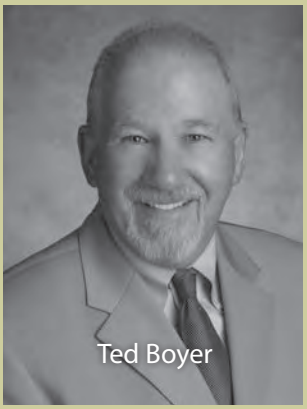
June 30, 2018

	FISCAL YEAR 2018					
	WATER DEPARTMENT	SEWER DEPARTMENT	STORMWATER DEPARTMENT	STREET LIGHTING DEPARTMENT	COMBINED 2018	COMBINED 2017
OPERATING REVENUES:						
Metered sales	$ 71,647,276	$ —	$ —	$ —	**$ 71,647,276**	$ 71,570,291
Charges for sewer services	—	33,620,751	—	—	**33,620,751**	24,670,395
Stormwater fees	—	—	8,508,507	—	**8,508,507**	8,421,072
Streetlighting fees	—	—	—	4,198,227	**4,198,227**	4,216,133
Other	4,267,472	468,277	38,889	29,630	**4,804,268**	4,511,421
Total operating revenues	75,914,748	34,089,028	8,547,396	4,227,857	**122,779,029**	113,389,312
OPERATING EXPENSES:						
Cost of sales and service	$ 44,219	11,442,200	3,785,658	1,892,028	**61,339,681**	59,248,363
General and administrative	9,731,795	3,233,975	1,840,282	216,631	**15,022,471**	17,384,216
Depreciation	8,892,526	6,549,752	2,913,601	441,022	**18,796,901**	18,436,791
Total operating expenses	62,843,904	21,225,927	8,539,541	2,549,681	**95,159,053**	95,069,370
OPERATING INCOME (LOSS)	13,070,844	12,863,101	7,855	1,678,176	**27,619,976**	18,319,942
OTHER REVENUE (EXPENSE):						
Bond interest expense	(272,961)	(3,484,127)	(169,580)	(91,033)	**(4,017,701)**	(1,644,619)
Bond premium	83,241	427,402	—	—	**510,643**	45,786
Less capitalized interest portion	272,961	1,425,477	113,500	—	**1,811,938**	1,322,134
Net bond interest expense	83,241	(1,631,248)	(56,080)	(91,033)	**(1,695,120)**	(276,699)
Investment income, net	831,749	1,579,221	115,773	88,339	**2,615,082**	1,069,802
Gain on disposition of property and equipment	221,936	478	10,638	—	**233,052**	139,914
Net other revenue	1,136,926	(51,549)	70,331	(2,694)	**1,153,014**	933,017
CAPITAL CONTRIBUTIONS AND GRANTS	3,325,006	1,949,869	720,931	195,808	**6,191,614**	14,313,653
CHANGES IN NET POSITION	17,532,776	14,761,421	799,117	1,871,290	**34,964,604**	33,566,612
NET POSITION:						
Beginning of the year	372,404,576	212,463,303	108,351,325	8,081,039	**701,300,243**	667,733,631
End of the year	$389,937,352	$227,224,724	$ 109,150,442	$ 9,952,329	**$736,264,847**	$ 701,300,243

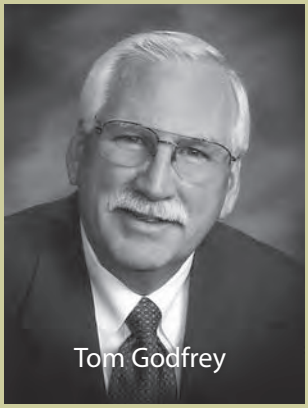
PUBLIC UTILITIES ADVISORY COMMITTEE

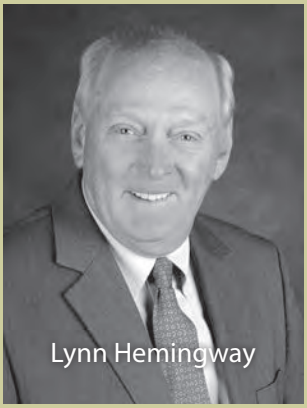

Colleen M. Kuhn, Ph.D.
Chair


Ted Wilson
Vice Chair


Ted Boyer


Sydney Fonnesbeck


Tom Godfrey


Lynn Hemingway


Kent Moore


Roger Player

The Public Utilities Advisory Committee (PUAC), meets monthly to provide guidance and oversight on departmental operations, rate schedules, legislative issues, and policy decisions. Members serve as volunteers, are vetted and approved by the Mayor and City Council and represent customers throughout the Department's service area. PUAC members serve four-year terms.

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES ADMINISTRATION

Laura Briefer, MPA
Director

Jesse Stewart, PG
Deputy Director

Mark Christensen, CPA
Acting Finance Administrator

Marian Rice, MPA
Water Quality &Treatment Administrator

Jason Brown, PE
Chief Engineer

Randy Bullough
Maintenance Superintendent

Jamey West
Wastewater Facilities Manager

Nick Kryger, GISP
GIS and IT Administrator

SALT LAKE CITY ADMINISTRATION

Jackie Biskupski
Mayor

Patrick Leary
Chief of Staff

Margaret D. Plane
City Attorney

Rusty Vetter
Deputy City Attorney

Cindi Mansell, NMC/CRM
City Recorder

Marina Scott
City Treasurer

SALT LAKE CITY COUNCIL

James Rogers
District 1

Andrew Johnston
District 2

Chris Wharton
District 3

Derek Kitchen
District 4

Erin Mendenhall
District 5

Charlie Luke
District 6

Amy Fowler
District 7

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