



**SALT LAKE CITY DEPARTMENT
OF PUBLIC UTILITIES**

2016 ANNUAL REPORT





Water Department Established

1876

Sewer Utility Formed

1979

**Stormwater Functions
Transferred to Department**

1991

**Street Lighting
Utility Formed**

2012

From the Department

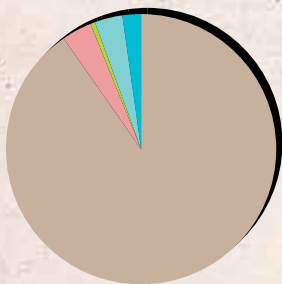
This year at Public Utilities we have seen a lot of change—a new mayor, new council members, a new director, new division managers, even new processes. With these changes comes the chance to evaluate how we operate, so that we may hold on to what works, but also seize opportunities to improve our department. For instance, new nutrient standards have opened the door to re-branding our Water Reclamation Facility. Changing energy policies are leading us to invest in renewable energy and energy efficiency projects. And the establishment of the Central Wasatch Commission will allow us to strengthen partnerships and harness new resources for work in our precious watersheds.

However, what we are at our core has not changed. At Public Utilities, we reaffirm that not only do we serve our community, but we are an integral part of that community. Within the linked roles of community member and public servant, we have a long history of environmental stewardship, one that dates back to the establishment of this department. Public service and environmental stewardship are so intertwined in our work and processes, that years ago we adopted the motto, *"Serving our community; protecting our environment"* as a daily reminder and declaration to this community of our intent. That motto still works for us.

Drinking Water

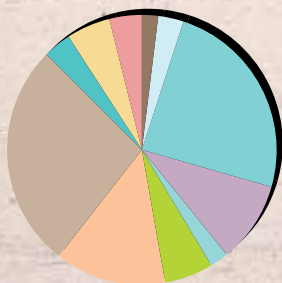
We deliver high quality drinking water to Salt Lake City, Holladay, Cottonwood Heights, Millcreek, and portions of the unincorporated county through more than 90,000 service connections, meeting or exceeding all state and federal regulations. Our water is sourced from surface water and groundwater wells supplied through city-owned facilities or purchased from wholesale water suppliers.

To ensure our water quality, we monitor, sample, and analyze our source waters, our treatment processes at the facilities, and the finished drinking water at locations throughout the distribution system. We also monitor connections within the system through our cross connection program.



Water Utility Sources

Water Sales	\$64,993,459
Other Income	2,787,331
Interest Income	358,450
Contributions	2,402,863
Reserves	1,439,351
Total	\$71,981,454



Water Utility Uses

Sources of Supply	\$1,534,229
Power & Pumping	2,258,044
Purification	17,574,559
MWDSLS Assessment	7,021,892
Shops & Maintenance	1,659,245
Finance	4,255,430
Trans. & Distribution	9,607,359
Capital	19,558,769
Administration	2,513,533
Payment to City	3,730,647
Debt Service	2,267,747
Total	\$71,981,454

Service Connections

91,467

Service Area

135 sq. miles

Gallons of Water
Delivered

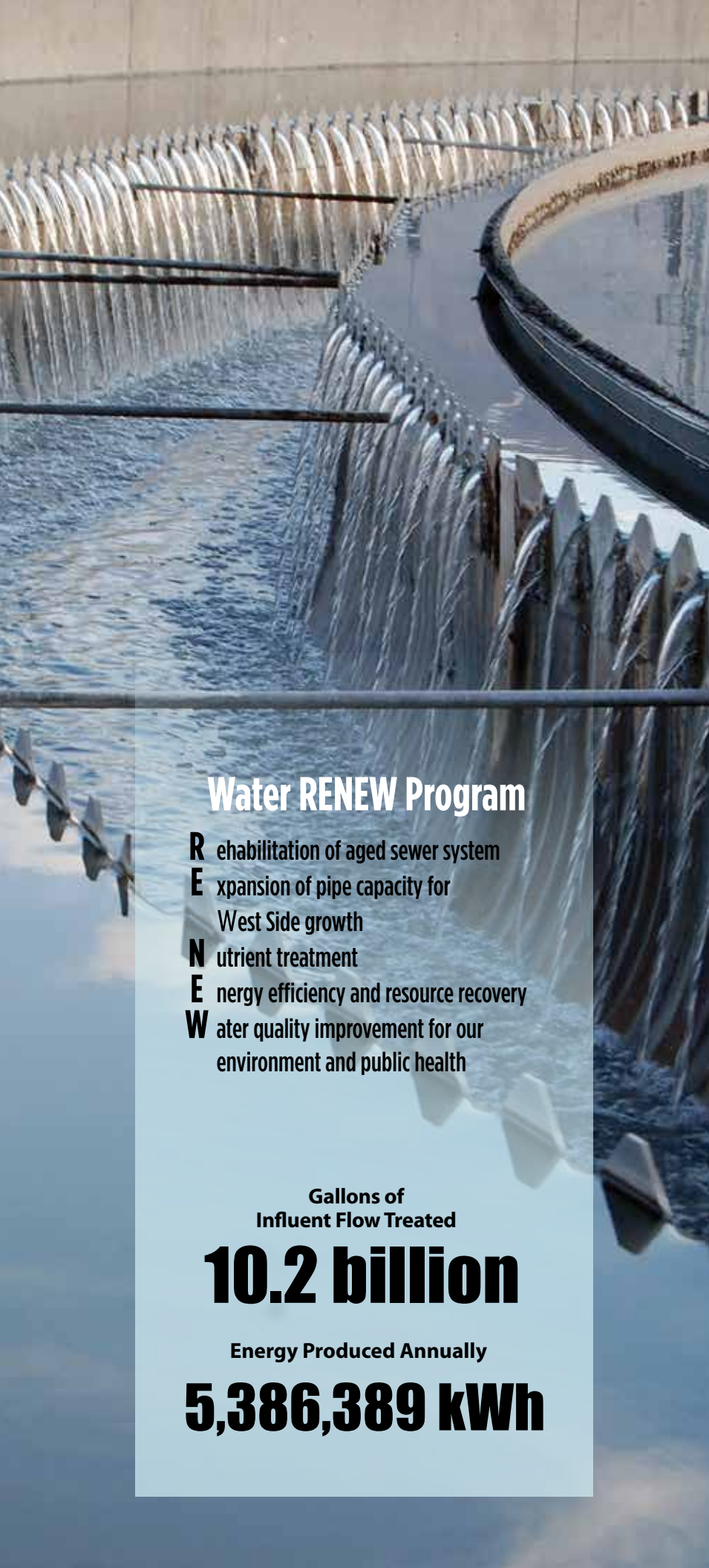
23.7 billion

Population Served

312,280

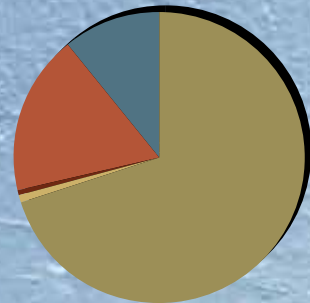
Drinking Water Violations

0



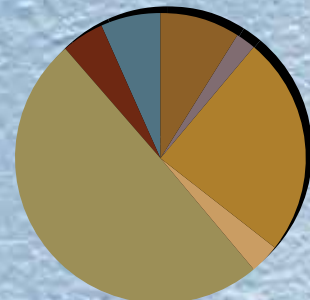
Wastewater

Wastewater (sewage) is collected and treated by our Wastewater Utility. Besides implementing, managing, and monitoring the treatment process, other efforts include technical analysis, asset management, capital improvement planning, project design, construction management, mapping, system modeling, and pre-treatment. Additionally, along with treating sewage to levels better than federal and state regulations, we reduce our carbon footprint through the collection and use of methane gas, lessen the pressure on the landfill by repurposing biosolids, conserve water through the utilization of reuse water on the facility landscape, and remove tons of pollutants in the treatment process which enables us to return billions of gallons of treated water back into the environment each year.



Wastewater Utility Sources

Customer Billing	\$ 21,709,585
Other Income	251,362
Interest Income	172,185
Contributions	5,484,051
Reserves	3,311,405
Total	\$ 30,928,588



Wastewater Utility Uses

Collections	\$ 2,549,158
Pumping	564,705
Reclamation	6,835,983
Finance	840,931
Capital	13,903,827
Administration	1,262,685
Payment to City	1,837,523
Debt Service	3,133,776
Total	\$30,928,588

Water RENEW Program

Rehabilitation of aged sewer system
Expansion of pipe capacity for West Side growth
Nutrient treatment
Energy efficiency and resource recovery
Water quality improvement for our environment and public health

Gallons of
Influent Flow Treated

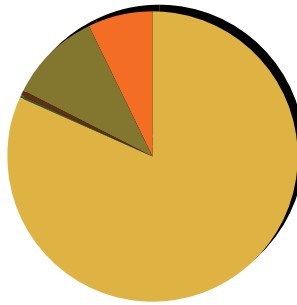
10.2 billion

Energy Produced Annually

5,386,389 kWh

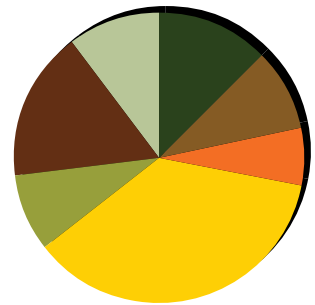
Stormwater

The Stormwater Utility is responsible for monitoring and maintaining the quality of our stormwater discharges. We work to ensure that stormwater discharges, as well as the creeks and rivers to which it drains, are as pure as possible and that we adhere to the Federal Clean Water Act (CWA), the Utah Water Quality Act, and the Utah Pollution Discharge Elimination System (UPDES) permit for Municipal Separate Storm Sewer Systems (MS4). We routinely collect samples from the stormwater system to demonstrate compliance with our permits. We monitor industrial operations and construction activity throughout the city to ensure that best management practices are followed. Collaboratively, we work with other city and county agencies to educate and involve the community in adopting best practices which help to reduce pollution in stormwater.



Stormwater Utility Sources

Customer Billing	\$ 8,216,974
Other Income	28,776
Interest Income	45,010
Contributions	1,028,014
Reserves	710,136
Total	\$ 10,028,910



Stormwater Utility Uses

Collections	\$ 1,273,087
Engineering	916,236
Water Quality	627,217
Capital	3,652,334
Administration	863,534
Payment to City	1,677,706
Debt Service	1,018,796
Total	\$ 10,028,910

Cubic Feet of Floatables Stopped
from Entering the Jordan River

472

Miles of Gutters Cleared and Inspected

94

Miles of Lines Cleaned and Inspected

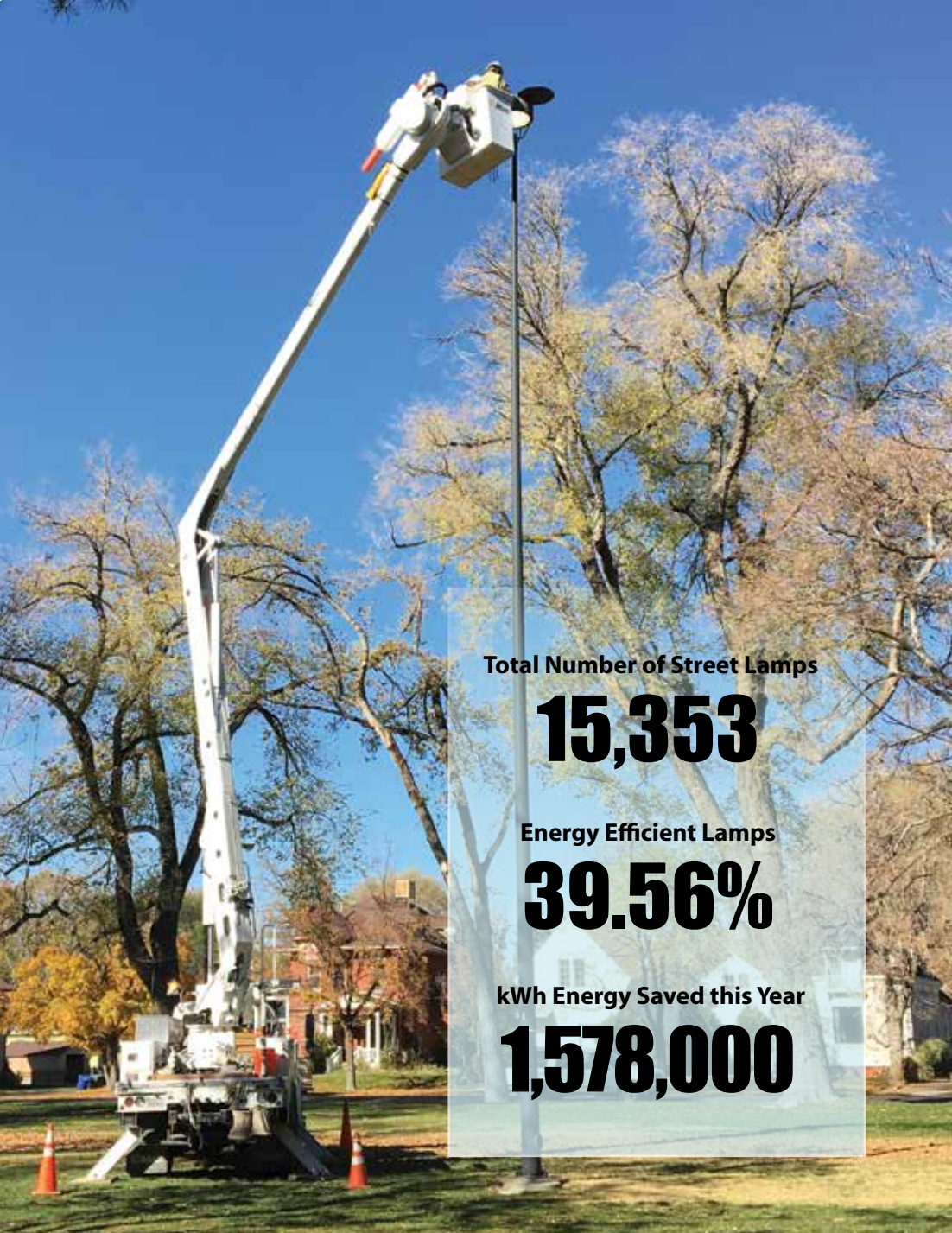
112

Storm Drain Inlets Cleaned

22,011

Pounds of Pharmaceuticals Collected

1,597

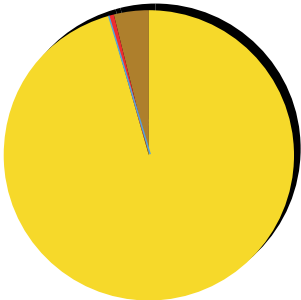


Total Number of Street Lamps
15,353

Energy Efficient Lamps
39.56%

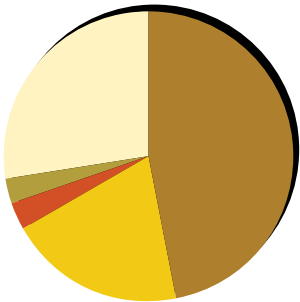
kWh Energy Saved this Year
1,578,000

Street Lighting



**Street Lighting
Utility Sources**

Customer Billing	\$ 3,263,790
Other Income	900
Interest Income	14,753
Contributions	128,457
Total	\$ 3,407,900



**Street Lighting
Utility Uses**

Maintenance	\$ 1,600,485
Capital	679,883
Administration	99,094
Payment to City	98,485
Reserves	929,953
Total	\$3,407,900

During the formation of this utility in 2012, the community was invited to participate in priority and goal setting. Besides this public process, a citizen committee was

formed, which helped to determine the fee structure and identify goals for the newly formed enterprise fund. Based in part on community input, a major

element of the initial capital improvement program is the conversion of the entire street lighting system to high energy efficient lamps within 10 years.





Employees

392

Enterprise Funds

4

Divisions and Workgroups

53

Fuel Use Reduction (gal.)
Since 2009

112,160

Standard & Poor's Rating

AAA

Customer Bills Annually

1,140,000

Debt Service
Coverage Ratio

4.21:1

Meter Read Accuracy

>99.95%

Administration

The Administrative Division oversees and manages all of its enterprise funds, department policies, training, employee safety, media contact, human resource issues, and the affairs of the department with and on behalf of the Mayor both internally and with other external political organizations. Providing coordinated direction and support to carry out the department's goals and policies, Administration helps to ensure that all construction contracts, water exchange agreements, ordinances, and federal and state regulations are met.

Finance

The Finance Division manages money so that other department divisions can focus on their missions. Whether it is meter reading, customer service, billing, or accounting, this division does its part to make sure the department collects, distributes, manages, and protects all money sources. Finance manages, maintains, operates, designs, and implements internal control systems and processes that deal with the liquid nature of money. For Finance, money can be as liquid as water and nearly as difficult to conserve.

Customer Service

Customer Service is responsible for receiving and resolving customer calls, visits, internet payments, and other queries for all four enterprise funds. This group also reaches out to our customers regarding issues such as meter anomalies, late payments, and unusually high use. It is through the customer service group that we experience our most regular contact with the community we serve.



Walk-ins

5,763

Investigation Collections

\$2.13 million

Satisfaction Rating

94.6%

Phone Calls

113,382



Development/Contracts

Development and Contracts works to maintain federal and state regulations, various codes, and departmental standards that apply to water, sewer, and stormwater system connections and main extensions, as well as flood control regulations and riparian corridor issues. A liaison with other city departments and other jurisdictions on planning, permitting, and development issues, this group is often the link connecting developers and department groups such as GIS/IT, billing, customer service, storm water quality, pretreatment, backflow prevention, maintenance and operations, and construction inspection.

Walk-ins

1,950

Plans
Reviewed

3,100

New Sewer
Laterals

264

New Water Services

230



Square Miles
of Service Area

135

Culinary Tanks
and Reservoirs

30

Sewer Collection Lines

653

Stormwater Inlets

14,000

Asset Management

Asset Management begins with an accurate inventory of all of our physical assets, which includes pipes, valves, pumps and lift stations, treatment and sewer reclamation facilities, manholes, and so much more. The next step is to identify the condition and criticality of each asset, with the goal of developing a plan for each and every asset. Condition is related to the ability of an asset to perform its intended function, while criticality is related to the importance of the function performed. Assessments focus on identifying deficiencies in inventory, condition, and criticality, and plans may include inspection, cleaning, preventative maintenance, or a capital improvement project such as rehabilitation or replacement. Resources from various workgroups are brought together in a collaborative effort to provide a more effective, holistic method to manage assets and protect our community—predictive maintenance, not reactive. The result of our asset management program is efficient use of time and monetary resources, a high level of service in terms of minimized system failures, and enhanced public health and safety.

ASSET PERFORMANCE CRITERIA:

**Regulatory
Safety
Water Quality
Customer Satisfaction
Structural/Seismic Integrity
Capacity
Carbon Footprint**

Capital Improvement

The Capital Improvement Program is driven by the Asset Management program, where budget and planning come together to address infrastructure. The program provides timely, cost efficient repair or replacement of facilities to address deteriorating structural conditions, changing regulatory standards for public health and safety, efficiency improvements, or increase the capacity of our facilities to meet the demands of growth. When it comes time to implement improvements, we employ various cost saving and efficiency measures that take advantage of the latest construction methods, new and better materials of construction, and economies of scale

afforded the size of our system, all with the goal of being carbon free by 2032.

An important strategy to minimize negative impacts to the community is to combine and coordinate projects with other internal and external agencies; this may include City Engineering, UDOT, or one of our service area cities. Another strategy is to create a variety of venues through which the public can engage in the planning and prioritization of these projects, including attending community meetings.

Capital
Improvement Projects
(in millions of dollars)

\$97.6

Water

\$18.8

Sewer

\$72.3

Stormwater

\$5.5

Streetlighting

\$1.0

Number of
Capital Projects

201

Water

82

Sewer

82

Stormwater

31

Streetlighting

6



GIS/IT

The GIS/IT Division is helping lead the department towards greater efficiencies by developing integrated work flow processes and utilizing mobile applications. We do this by maintaining asset management databases, including maintenance costs and utility conditions; and working with our department colleagues to create customized reports and models to help in day-to-day tasks and the planning and design processes. Every enterprise fund, division, and work group within the department is linked through the GIS/IT network: meter reading, billing, customer service, maintenance, distribution, watershed, development review, water conservation, cross connection, and more. The department's computer hardware and software are also supported by GIS/IT.

GIS/IT provides other city departments, county and state agencies, and private property owners with mapping and location information, including Blue Stakes. Additionally, both in emergency planning and response, GIS/IT provides the mapping and other information critical to ensure that the department is prepared and can respond effectively and efficiently, ensuring our ability to protect our community.



Blue Stakes Requests

59,976

Mobile Citizen Reports

1,706

Flow and Capacity
Models Developed

156

Work Orders Processed

18,605

Feet of New Pipe Surveyed

61,865

Maps Created

4,264

Water, sewer, stormwater, and street lighting infrastructure are mapped and surveyed through GIS/IT, where vast amounts of data is collected, managed, and merged to make possible the modeling and assessments necessary to ensure that each and every system functions at optimum standards and integrates efficiently. Maps of department properties and critical watershed lands are maintained, as are the department's website, social media venues, and SLCMobile—critical components of our community outreach.





**Watershed Acres Purchased
for Protection**

31,183

Square Miles of Watershed

189.95

**Drinking Water Derived
from Wasatch Watershed**

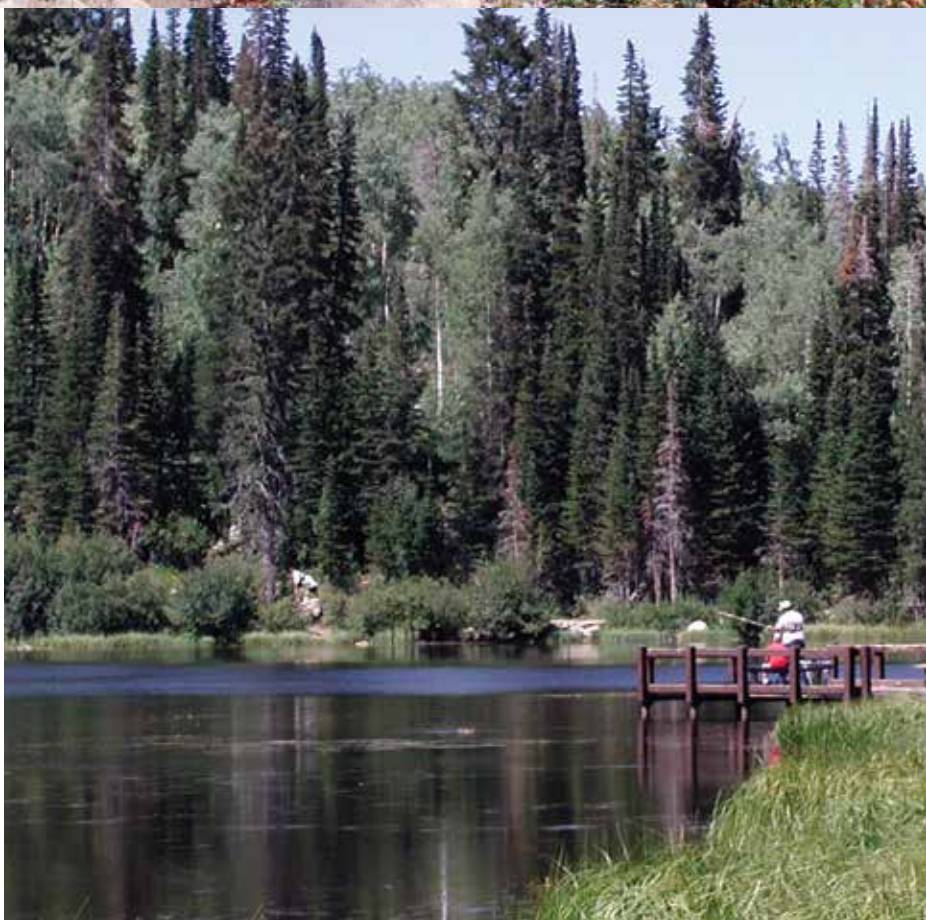
60%

**First Patrols to
Protect Watershed**

1911

Water Resources

It is the role of Water Resources to ensure that our sources of water are protected from pollution, our water rights are preserved, and our water is used appropriately and wisely. This protection begins in the watershed, where watershed rangers patrol the mountains towering over the Salt Lake Valley, an area roughly 190 square miles, monitoring for compliance with watershed regulations, educating visitors, stewarding the land, and managing recreation facilities. Water Resources staff are responsible for documenting streamflows, maintaining water rights, designing and implementing water conservation programs, managing water agreements and contracts, and working collaboratively with numerous federal, state, and local government agencies, private organizations, and the citizens we serve.



Safety

Safety is not what we do, but it is *how* we do our jobs. Every day and in every task, we want to be productive, serve our community, and still make it home at the end of the shift, healthy and in one piece. We owe our employees—and our rate payers—a safety program.

The program educates employees on our responsibility to ourselves and their co-workers to work safely, and includes job training, utilization of Safety Committees, recognition and award programs, accident investigation, worker compensation case management, and job safety analysis. With increased number of new or repositioned employees, there is a new focus on not only safety training, but efficiency training, which allows for an improved work/task experience and enhanced safety.



Safety/Training Meetings

481



Daily Per Capita Consumption

2000: 285

2015: 189

Solar Energy
Used Annually

4,572,000 kWh

Conservation

One important way we both serve our community and protect our environment is through our water conservation programs and the implementation of our Water Conservation Master Plan. Recently, we were awarded a grant from the US Department of the Interior Bureau of Reclamation through their WaterSMART Drought Planning program to update our Water Shortage Contingency Plan. Another aspect of working our motto is our initiatives

pertaining to energy use reduction and alternative energy supplies.

Water supply, demand management, energy use, and climate change are threads woven into our planning processes. Through all of our efforts, we can achieve our goals of maintaining a resilient, sustainable water supply and reduce our carbon footprint.

Salt Lake City Department of Public Utilities

Water, Sewer, Stormwater, and Street Lighting

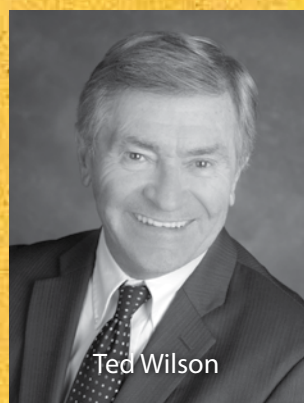
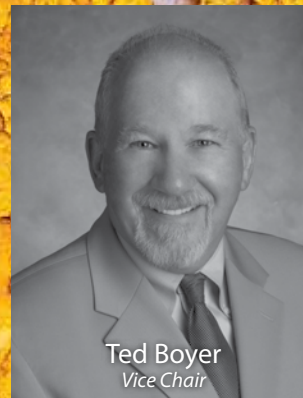
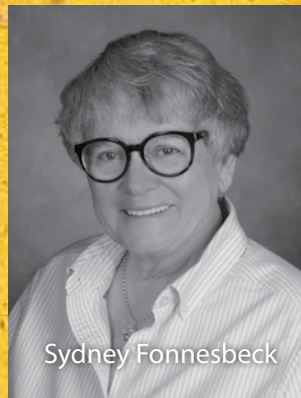
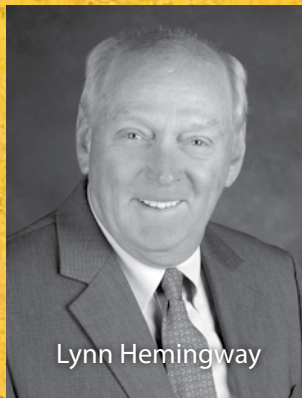
Combined Statement of Revenues, Expenses, and Changes in Net Position for
the Enterprise Funds of Salt Lake City Department of Public Utilities

June 30, 2016

	FISCAL YEAR 2016				
	WATER DEPARTMENT	SEWER DEPARTMENT	STORMWATER DEPARTMENT	STREET LIGHTING DEPARTMENT	COMBINED 2016
OPERATING REVENUES:					
Metered sales	\$ 64,993,459	\$ —	\$ —	\$ —	\$ 64,993,459
Charges for sewer services	—	21,709,585	—	—	21,709,585
Stormwater fees	—	—	8,216,974	—	8,2216,974
Streetlighting fees	—	—	—	3,263,790	3,263,790
Other	2,440,814	232,235	24,304	900	2,698,253
Total operating revenues	67,434,273	21,941,820	8,241,278	3,264,690	100,882,061
OPERATING EXPENSES:					
Cost of sales and service	\$ 40,778,938	10,496,715	3,791,652	1,600,485	56,667,790
General and administrative	9,376,000	3,394,270	1,566,128	197,579	14,533,977
Depreciation	8,342,288	6,232,248	2,961,965	333,283	17,869,784
Total operating expenses	58,497,226	20,123,233	8,319,745	2,131,347	89,071,551
OPERATING INCOME	8,937,047	1,818,587	(78,467)	1,133,343	11,810,510
OTHER REVENUE (EXPENSE):					
Bond interest expense	(496,333)	(563,459)	(203,922)	—	(1,263,714)
Bond premium	36,942	—	—	—	36,942
Less capitalized interest portion	489,655	563,459	95,644	—	1,1148,758
Net bond interest expense	30,264	—	(108,278)	—	(78,014)
Investment income, net	358,450	172,185	45,016	14,753	590,398
Gain on disposition of property and equipment	346,517	19,127	4,472	—	370,116
Net other revenue	735,231	191,312	(58,796)	800	662,830
CAPITAL CONTRIBUTIONS AND GRANTS	2,402,863	5,484,051	1,028,014	128,457	9,043,385
CHANGES IN NET POSITION	12,075,141	7,493,950	890,751	1,276,553	21,736,395
NET POSITION:					
Beginning of the year	337,668,047	196,886,406	106,090,420	5,352,363	645,997,236
End of the year	\$349,743,188	\$204,380,356	\$ 106,981,171	\$ 6,628,916	\$667,733,631



Public Utilities Advisory Committee



A long standing volunteer group, the Public Utilities Advisory Committee provides input into departmental operations, rate schedules, and policy decisions. Members

serve four-year terms and represent customers throughout the department's service area.

SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES ADMINISTRATION

Laura Briefer, MPA
Director

Thomas Ward, PE
Deputy Director

Jesse Stewart, PG
Deputy Director

Kurt Spjute, CPA
Finance Administrator

Marion Rice, MPA
Water Quality Administrator

Jason Brown, PE
Chief Engineer

Mark Stanley
Maintenance Superintendent

Dale Christensen
Wastewater Facilities Manager

Nick Kryger, GISP
GIS and IT Administrator

SALT LAKE CITY COUNCIL

James Rogers
District 1

Andrew Johnston
District 2

Stan Penfold
District 3

Derek Kitchen
District 4

Erin Mendenhall
District 5

Charlie Luke
District 6

Lisa Ramsey Adams
District 7

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
Department Of Public Utilities

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