# salt lake city public utilities 2012 ANNUAL REPORT



Serving our Community; Protecting our Environment







# DIRECTOR'S MESSAGE

Even before I became director of the Salt Lake City Department of Public Utilities (the Department), I recognized the extraordinary importance of the Wasatch Mountains and their streams to our public water supplies and our community's well-being. The good health of these mountain watersheds—the land, vegetation, snow, riparian areas, habitats, and ecosystems—facilitates the water cycle and ultimately connects these mountains to faucets across the Salt Lake Valley. We are fortunate that past City leaders recognized this connection, too, and it is hoped that the next generation of leaders will continue this legacy. Salt Lake City, a growing and prosperous community, depends on the Wasatch Mountain watersheds for a clean, pure water supply, and our predecessors' foresight and our continued watershed stewardship mean this critical resource will continue to be available.

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The high-elevation mountains of the Central Wasatch capture storm systems tracking through northern Utah in the winter, resulting in bountiful snows. The water released during the spring and summer snowmelt nourishes life in the terrestrial, riparian, and aquatic environments of the mountains and the downstream valley. This water also constitutes the majority of the drinking-water supply for residents of the Salt Lake Valley and is therefore critical to the health and economic prosperity of our communities. There is an inextricable connection between our well-being and the health of the watersheds and ecosystems of the Wasatch Mountains. From City Creek Canyon to Little Cottonwood Canyon, the Wasatch watersheds we depend upon for water also feed our collective desires for recreation, beauty, fresh air, and sustenance.

As we think about the water legacy we are leaving for future generations and the evolving challenges that threaten the health of the Wasatch Mountains, we need to be flexible and creative to protect our watersheds. This may require focusing on priorities that are not always comfortable for everyone or considering new ways of stewardship that extend the existing paradigm. We will need to communicate well, listen carefully, and seek to understand other points of view, all tasks that are sometimes easier said than done. To guide us through these difficult times ahead, we should always remember our community's historical relationship with water and the Wasatch Mountains and take care to not undo the good planning and foresight of our predecessors.

### **DRINKING WATER**

Maintaining our water supply to meet the demands in our community is a balancing act between understanding and anticipating two variables that are dynamic and complex: our pattern of behaviors related to consumption and the quantity and character of the water that nature provides. We plan, build, and maintain our water system to optimize what nature delivers. As to demand, we can plan for that, too, both in the size and scope of the infrastructure we design and build, and in studying patterns and influencing behavior pertaining to how our water is used. Planning for supply and influencing behavior are both indirect methods aimed at affecting that over which we have no control: the impact of climate on our water supply.

Water storage provides us the opportunity to retain water derived from snow melt in good snow years in anticipation of bad winters or prolonged high summer temperatures and increased water demand. Both short-term variability in snow pack and those diminished snow levels from year to year that earn the label *drought* require conservation and water management planning foresight to provide uninterrupted water availability. The longer the period of diminished snow fall or extended dry summer weather, the more crucial planning and foresight becomes to meet the needs of our community.

The City's surface water storage can be divided into those structures we control: Little Dell and Mountain Dell Reservoirs and some small back country lakes; and those managed by others on our behalf: Deer Creek and Jordanelle Reservoirs. Significant monitoring and best professional judgment goes into maintaining the water supply in our surface water reservoirs. Maintaining optimal water storage while preventing dam overflows and flooding seems at times as much fortune telling as science. To have enough stored water and yet avoid not having enough space in the reservoir to control spring run-off and summer monsoons is a delicate balance of intuition and calculation. From the first snowfalls until the last of the hot, stifling, dry summer days, reservoir levels are monitored and controlled. With the uncertainty of climate change this process becomes more and more critical in maintaining the availability of water for our growing population.



Ground water resources are also included in this balance, with roughly twenty percent of our water supply provided by deep wells. These wells retain water on a similar, though slightly off-set schedule to the surface flows. A really good winter will help refill the aquifer, while also providing stream flow to fill our reservoirs, allowing us to meet most water demand with the surface water. When drought hits, ground water can provide relief for a time; however, several drought years in a row can tax the aquifer at the same time that our reservoir supplies are being diminished by demand which extracts water faster than snow or rain, what little may occur, can refill.

Ground water has often been the resource used to supplement decreased surface water supply for our community by maintaining adequate volume and system pressure. Sustained surface water flow is determined by the amount of snow and its melting pattern. However, while water in the form of rain doesn't provide the sustained flow of snow melt, it does supplement the ground water supply. As we look forward to potential changes in the snow regime related to climate change, increased rainfall supplementing underground water storage may be the vehicle to meeting our water supply needs. Conservation will take on a greater role; the reality is that money won't be able to buy what isn't available.

How we maintain our water infrastructure is as vital to providing adequate supply as is keeping the reservoirs full or the wells from running dry. The maintenance of our underground facilities is a necessary step towards preserving our precious resources. Pipe repair and maintenance is critical to preserving our water resources. Leaking pipes and major breaks contribute to water loss; during drought years that loss is felt even more when literally every drop counts.

Nationally, the issue of an aging infrastructure in need of repair and replacement is seen as being potentially one of the most significant impediments to providing safe and adequate supplies of water to thousands of communities across the country. As portions of our system facilities age, the loss of water, coupled with increased demand and potential lack of supply due to climate change make the effort to replace and sustain our infrastructure more urgent. In response, the Department has budgeted \$7 million in this next fiscal year for capital improvements to the water system, replacing pipes, valves, and water lines. These expenditures are minimal compared to the cost of replacing the 1300 miles of pipe the Department maintains underground, but represents a worthy year's effort towards sustaining our infrastructure resource and meeting the current and future needs of our community.



Washing off a building or sidewalk, washing the car or changing its oil, not picking up after the dog, hosing out a wheel barrel at a work site, or allowing leaves to accumulate in a gutter all are activities that contribute to stormwater pollution.





## **STORMWATER**

n a daily basis we drive on City streets, maintain our property, and exercise our pets. These are parts of our daily lives that unknowingly impact the quality of the water in our streams and the Jordan River. Seldom is the release of materials into the street recognized by the homeowner or commercial interest as having environmental impacts. Washing off a building or sidewalk, washing the car or changing its oil, not picking up after the dog, hosing out a wheel barrel at a work site, or allowing leaves to accumulate in a gutter all are activities that contribute to stormwater pollution. The water that flows over our sidewalks and streets carries the chemicals, trash, and debris we leave behind and pours into our

stormdrains, affecting the condition of our creeks, rivers, and eventually, the Great Salt Lake. Stormwater pollution harms the health of our waterways, negatively affecting native vegetation, wildlife, recreational opportunities, our economy, and ultimately our pocketbooks.

The Department has actively committed to building an effective Stormwater program for our community. The installation and maintenance of the storm sewer system along with the monitoring of the water quality collected by it are supported in the department's budget. Capital improvements in the 2011-12 fiscal year were over \$11 million, followed by a robust expenditure in the 2012-13 budget of \$7 million. Expenses include repairs and improvements in the systems lift stations, culverts, bridges, and riparian corridors. Along with these infrastructure projects, public education designed for both residential and commercial customers focusing on the importance of protecting and improving the water quality in the storm drainage system is intended to help continue improvements to the Jordan River.

In the early days of Salt Lake City, the Jordan River was seen as a convenient conveyance of unwanted fluids, garbage, and other materials out to the Great Salt Lake. Today we feel differently about this abused treasure running through the valley and the lake in to which it drains. A positive result of the Utah State Department of Environmental Quality (DEQ) listing of the river on the 303D List of Impaired Waterways has been the increased and collaborative efforts of communities along the riverway to address the legacy left as a consequence of ignoring the health of the Jordan River. Today the Department is working with DEQ and other entities in the valley to identify what is causing the river impairments as well as to identify strategies for water quality improvements.

The Jordan River may be suffering from "use abuse." It receives stormwater flows from every community along its banks, and discharges from wastewater facilities from some upstream users. Illegal dumping also causes issues. As a community we have to address these activities that negatively affect the river and its health. We also need to address discharges that are incompatible with the river's designated uses as defined by State rule. We need to identify behaviors that harm the Jordan River and implement strategies that result in substantial and sustainable improvements to the river. If we have to treat stormwater to protect the river, the costs will be high.

The Department's stormwater team is working to identify best management practices that every resident and commercial interest in the community can implement to limit discharges of pollutants to our stormdrain system. This includes identifying industrial discharges as well as residential practices that negatively impact stormwater quality and ultimately the health of the Jordan River. For example, working with Water Conservation, they have drafted a manual of best management practices (BMPs) for landscape design, construction, and maintenance. These BMPs provide guidance for reducing or eliminating stormwater pollution and increasing water use efficiency in the landscape.

This autumn, the Department began the redesign of the stormwater outflow along 900 South, between 900 West and the Jordan River. The project will involve the re-engineering of the existing stormwater canal to establish a wetland treatment facility capable of improving the stormwater quality that flows from the 900 South Stormdrain System into the Jordan River. The project intent is to treat storm flows through a natural wetland area, demonstrating that it is possible to decrease the transport of contaminants into the Jordan River.

Added project benefits will include stormwater best practices education, riparian and water conservation demonstration gardens, pathways, and overlooks in the wetlands and gardens, and interpretive materials for visitors that describe the facilities functions. This will provide community members with tips on behavioral practices and examples of alternative landscape and behavioral approaches that may be adopted to improve stormwater quality. The community, along with the Department, has a vital role to play in restoring the Jordan River.



#### 900 South Wetlands Crossection



### SEWER

The Department is currently studying the environmental and financial impacts associated with meeting the potential future implementation of nutrient (nitrogen and phosphorus) standards by the Utah Division of Water Quality (DWQ). Working with consultants, the Department is assessing the viability of several process changes and upgrade scenarios at the Water Reclamation Facility (WRF). Desired outcomes of the study also include evaluating other system upgrades and construction sequencing.

Desiring to optimize opportunities associated with system

upgrades relating to changes in nitrogen and phosphorus standards, the Department is looking to develop a deeper understanding of the capital and operation and maintenance (O&M) costs associated with other potential facility expansions and improvements to accommodate specific upgrades for nutrient removal foreseen during the same timeframe. It will also be critical that, during the time that the WRF is undergoing system upgrades that it remain fully functional and operational. To that end, the study will include a detailed assessment of the sequencing required to implement all of the potential upgrades, should they occur.



The WRF is currently designed for a maximum monthly average capacity of 56 million gallons per day (mgd) (UPDES Permit No. UT0021725) and receives an average daily influent flow of 34 mgd. The facility includes a trickling filter/activated sludge (TF/AS) process with primary treatment to meet biochemical oxygen demand (BOD) and total suspended solids (TSS) limits. Residual primary and secondary solids are co-settled in the primary clarifiers, thickened using gravity thickeners, and stabilized using conventional mesophilic anaerobic digestion. The resulting biosolids, which are currently cured on drying beds, are either used for landfill cover or mine reclamation. Ferric chloride is added to the thickened sludge piping for biogas sulfide control and can also be added to the primary clarifiers for enhanced primary clarification. Currently the facility is undergoing construction to improve and expand the existing anaerobic digesters and to add a waste activated sludge (WAS) thickening facility.



Among the process changes being considered, the baseline scenario addresess future nutrient limits and the best long-term plan for the WRF to transition from the current TF/AS process to an activated sludge-only (AS) process. This approach was modeled to meet the facility's Utah **Pollutant Discharge Elimination** System permit (UPDES) limits for BOD and TSS. Implementation of a full AS facility would require a new 135-ft diameter primary clarifier along with the expansion of the existing aeration basins from the current 6MG to 8.5 MG with additional blower capacity. A primary effluent pump station would be needed to transfer flow from the primary clarifiers to the expanded aeration basins. Some of the current biosolids drying area

would be needed to accommodate the aeration basin expansion. Two additional 159-ft diameter secondary clarifiers would be needed to handle the increased solids loading from the AS system and a peak hourly flow of 140 mgd due to the additional return activated sludge/waste activated sludge (RAS/WAS) pumping capacity, and the chlorine contact basins would need expanding. To efficiently accommodate increased amounts of biosolids in the reduced biosolids drying area, a mechanical biosolids dewatering system would be needed.

In the second scenario, the above baseline improvements would occur with the addition of converting the existing chlorine disinfection process to an ultraviolet (UV) disinfection system, and replacing the sludge drying beds with a composting facility. Several nutrient removal options are under consideration based upon the Utah Division of Water Quality's cost impacts analysis study conducted in 2010. The treated effluent water quality ranges include: 1 milligram per liter (mg/l) total phosphorus (TP) and 20 mg/l total nitrogen (TN), 1 mg/l TP and 10 mg/l total inorganic nitrogen (TiN), and 0.1 mg/L TP and 10 mg/ TN.

A critical study outcome is an analysis of the optimum construction sequence to ensure full facility functionality during construction. Final components of the study, which is still being drafted, include construction and O&M costs associated with the various scenarios.

### WATER RESOURCES

Projected population growth in the Salt Lake Valley, pressure for land use changes, regional water resource challenges, and climate change impacts are requiring increasing focus, multidisciplinary approaches, and intergovernmental collaboration to ensure a sustainable water supply now and for future generations. The Water Resources Division of the Department was created this year to provide close operational and planning attention to the management and issues associated with our sources of drinking water, and to integrate a team that closely links together the Department's watershed management, source water quality, hydrology functions, water rights administration, and water conservation.

The value of reduced risk and incidence of illness and disease prevented through drinking water source protection can be considered priceless.

#### BENEFITS OF WATERSHED PROTECTION

Watershed protection is recognized by the US Environmental Protection Agency and many municipal water suppliers around the country—New York City, Eugene, Portland, Seattle, Santa Fe, and Denver, to name a few —as a critical strategy for sustainable, clean, safe, and reliable water supplies. The concept of watershed protection in its simplest form is to protect the landscape that feeds the surface water streams to minimize pollution in the water sources. This helps public water suppliers meet federal Safe Drinking Water Act requirements and protects human health.

Many of the cities that have implemented watershed protection strategies have estimated significant avoided economic costs associated with watershed protection. For instance, New York City spent about \$1.5 billion on watershed protection over 10 years to avoid \$6 billion in capital cost of building a filtration plant and \$300 million per year in operations costs. Portland, Oregon spends about \$920,000 per year in watershed protection costs to avoid a \$200 million capital cost associated with additional water treatment. Similarly, Salt Lake City spends about \$1 million per year in operational costs associated with watershed protection, but avoids spending hundreds of millions that would be associated with capital and operational changes to its water treatment processes. By avoiding additional treatment costs through watershed protection, Salt Lake City and other municipal water suppliers are also helping to sustain reasonable water rates to the public. Additionally, the value of reduced risk



and incidence of illness and disease prevented through drinking water source protection can be considered priceless.

Water treatment results in a removal of some, but not all, pollutants from a water supply. Watershed protection helps reduce and prevent harmful pollutants such as chemical waste, sewer overflows, and hazards that accompany human activity and development, from getting into the drinking water supply. In other words, the less waste upstream means less waste downstream. Studies have shown that reduction in source watershed contamination result in reduced illness and disease in the downstream population. This is particularly observed with young children, older individuals, and persons with compromised immune systems.

While the avoided costs of new infrastructure are significant, there are other important benefits of watershed protection that are less quantifiable, but critical. These benefits include protection of natural resources and environmental conditions with high socio-economic values. In addition, because communities must have water supplies in order to continue to grow and be prosperous, watershed protection helps to maintain a virbrant and economically sustainable community.

#### A GENERATIONAL CROSSROADS OF LAND USE PLANNING IN THE WASATCH

Over the last four years, several major visioning, planning, and legislative efforts concerning the Wasatch Mountain watersheds have been conducted. These include Wasatch Canyons Tomorrow, the Big and Little **Cottonwood Canyons Mountain** Transportation Study, a revision of Salt Lake County's Protective Foothills Canyons Overlay Zone, and a revision of Salt Lake County's General Plan for the Wasatch. In addition, two federal bills were introduced that encompass our Wasatch Watersheds and are currently pending in Congress: Congressman Jim Matheson introduced the Wasatch Wilderness and Watershed Protection Act in 2010, and Congressman Rob Bishop introduced the Wasatch Range Access and Recreation Enhancement Act in 2011. The Department has a significant role in each of these efforts so that water resources are considered.

In reviewing the list of major efforts on the future of the Wasatch Canyon watersheds, it is clear to us that our community is at a crossroads of planning and decision-making that will impact the Wasatch for future generations, just as the generations that came before us impacted the Wasatch landscape. The Department is working with other federal, state, and local government agencies to support a planning and decisionmaking process that considers impacts on a landscape scale, rather than a piecemeal approach.

#### FIRST PHASE OF CLIMATE CHANGE VULNERABILITY ASSESSMENT COMPLETE

This year, the Department completed the first phase of a climate vulnerability assessment to determine the sensitivity of our source water streams and to guide our climate adaptation planning. The analysis was conducted in a partnership with Western Water Assessment, the NOAA Colorado River Basin Forecast Center, University of Utah, Utah State University, and University of Massachusetts. The results of the study were presented at the annual Salt Lake County Watershed Symposium. The basic findings of the study show that temperature increases will cause mountain runoff to occur earlier, with reductions in stream flow volumes in each of our Central Wasatch streams (City Creek, Parleys, Mill Creek, Big Cottonwood Canyon, and Little Cottonwood Canyon). The next phases of our vulnerability assessment will evaluate climate impacts on water demand and a tree ring analysis to better understand potential climate scenarios.



### WATER CONSERVATION

ast winter brought us lower than average snow pack, and a hot, dry summer that has got us all whispering about another drought cycle. Salt Lake City is well positioned to manage such an event, if indeed we are at the beginnings of another drought. Since the last drought cycle, the Department has implemented a number of infrastructure modifications to improve system efficiency, including improved leak detection processes and improvements to metering at the water treatment plants. Conservation planning and education outreach are also important aspects of creating a resilient approach to water supply planning. And most importantly, our community has made great strides in the last decade at reducing outdoor water use, peak season demand, and even indoor water use. We have more to discover and much to accomplish as we work together to learn to use our precious water resources as efficiently and as wisely as possible.

Fortunately, water conservation planning and program implementation is not all statistics and seriousness. This past year our two water conservation demonstration gardens, Washington Square and Greater Avenues, thrived under the eager and tender care of hundreds of community volunteers brought to the gardens through a number of organizations, businesses, and individuals, via our partnership with Salt Lake City's *Service in the City*.



With our first event taking place in the spring and continuing through to the first big snow storm in November, volunteers have planted, weeded, pruned, mulched, and nurtured the gardens. The gardens have never looked better, thanks to the efforts of our generous volunteers and the *Service in the City* team.

### **FINANCIAL REVIEW**

Salt Lake City Department of Public Utilities has three enterprise funds: Water, Sewer, and Stormwater. Each utility serves as a separate financial entity, providing excellent services to their respective customers. The utilities do not receive tax support or transfers from Salt Lake City's general fund. Service fees are charged to cover operating costs and debt service.

Management maintains a sound financial structure for these entities by using conservative budget assumptions, funding capital improvements through rates, sustaining adequate reserves, and maintaining strong debt coverage rather than extended financing.

The accompanying financial information covers the three utility funds and highlights our accomplishments of maintaining a strong financial structure and meeting all financial bond requirements.

#### WATER UTILITY

The Water Utility continued to provide an excellent level of service to our customers. This past year the customer satisfaction rating increased by 3 percent over the previous year for a total rating of 96 percent satisfaction. Water revenues increased due to a very warm and early spring season and increased water rates, providing additional revenue over last year in the amount of \$3.8 million. Expenses trended higher as the utility incurred additional costs associated with purchasing additional treated water from the Metropolitan Water District of Salt Lake and Sandy.

#### **SEWER UTILITY**

The Water Reclamation Facility (WRF) completed another year of perfect NPDES permit compliance, completing eighteen years of perfect compliance. This past year the Utility continued construction on a major project replacing the walls and roof of three digesters at the Water Reclamation Plant at a cost over \$11 million. This project was partially funded by a \$6 million no-interest bond issue sold to the State of Utah under an ARRA Federal Grant Program. The Department continued working on an environmental remediation process started back in 2003 on the Sewer's Northwest Oil Drain (NWOD) Canal under a US Environmental Protection Agency (US EPA) administrative order and with a cost-sharing agreement between the Department, British Petroleum, and Chevron. The two oil companies contribute two-thirds of the project costs of the remediation, and the Department is contributing the remainder. As of June 30, 2012 the oil companies have contributed approximately \$9.2 million. Sewer rates increased 4.5 percent over last year.

#### **STORMWATER UTILITY**

Salt Lake City Council established the Stormwater Utility on July 1, 1991, to finance and maintain the city's aging stormwater infrastructure and to comply with programs mandated through the Clean Water Act amendments. Since that date, the utility has constructed or replaced more than \$98.62 million in stormwater facilities. Improvements to the system would not have been possible without the creation of the utility and the dedication of its employees.

Over the last three years at the request of the City Council, the Department embarked on a Riparian Corridor Study of four major creeks; City Creek, Parleys, Red Butte, and Emigration. This past year the Department hired a consultant to review the recommendations and help prioritize the restoration projects for all the creek areas. To help finance these future improvements, the City Council raised stormwater rates from \$4.24 to \$4.49 per residential equivalent over this last year.

#### **MAJOR CHALLENGES**

- Financing the Department's infrastructure improvements is rated as one of the greatest challenges. National studies decry the deterioration of the nation's water and sewer infrastructure and the lack of funding to keep pace with aging facilities and new facilities needed to meet more stringent standards.
- Impact of the down turn in the economy has affected all three enterprise funds. While it has decreased the construction costs of some projects by as much as 15 percent, our interest income has decreased by as much as \$2.5 million each of the last two years as interest rates have hit all time lows.



#### WATER UTILITY SOURCES

<ul> <li>Water Sales</li> <li>Other Income</li> <li>Interest Income</li> <li>Contributions</li> <li>Total</li> </ul>	60,015,084 2,217,619 314,043 1,980,186 <b>\$64,526,932</b>
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#### **STORMWATER UTILITY SOURCES**

Other Income Interest Income Contributions Reserves <b>Total</b>	183,796 55,067 416,980 5,816,895 <b>\$14,598,407</b>
Customer Billing	8,125,669



#### WASTEWATER UTILITY SOURCES

Total	\$42,092,825
Reserves	17,480,898
Contributions	6,691,539
Interest Income	247,219
Other Income	316,048
<b>Customer Billing</b>	17,357,121



#### WATER UTILITY USES

	Reserves Total	2,391,750 \$64 526 932
Ξ.	Debt Service	2,679,905
	Payment to City	3,386,507
	Administration	2,739,361
	Capital	15,385,548
	Trans. & Distributio	n 8,633,117
	Finance	3,813,325
	Shops & Maint	2,465,021
	MWDSLS Assessme	ent 7,021,892
	Purification	13,404,863
	Power & Pumping	1,718,940
	Sources of Supply	886,697



#### STORMWATER UTILITY USES

Water Quality	287,418
Capital	9,679,041
Administration	504 755
/ annihistration	50 17 55
Payment to City	1,397,469
Payment to City Debt Service	1,397,469 1,185,532

#### WASTEWATER UTILITY USES

Collections	2,026,933
Pumping	531,557
Wastewater	5,978,065
Finance	977,498
Capital	28,122,817
Administration	158,358
Payment to City	1,461,786
Debt Service	2,835,811
Total	\$42,092,825

### WATER UTILITY

	2008	2009	2010	2011	2012
Operating Revenue	\$ 55,115,297	57,244,555	53,902,661	58,098,067	61,921,062
Operating Expenditures	\$ -41,489,017	-42,475,818	-40,979,357	-43,536,176	-44,069,723
Depreciation and Amortization	\$ -6,137,369	-6,588,078	-6,824,427	-7,097,153	-7,406,182
Operating Income	\$ 7,488,911	8,180,659	6,098,877	7,464,738	10,445,157
Interest Income and Gain on Sales	\$ 2,517,507	852,925	578,898	394,502	625,684
Interest Expense (less capitalized)	\$ -645,530	-720,213	-393,236	-370,124	-471,674
Contributions and Grants	\$ 4,561,518	6,952,730	3,590,525	2,689,948	1,980,186
Change in Net Assets	\$ 13,922,406	15,266,101	9,875,064	10,179,064	12,579,353
Total Property, Plant, and Equipment	\$ 259,401,908	273,806,368	287,077,841	293,414,648	300,806,366
Total Assets	\$ 313,333,327	327,172,067	333,284,070	341,378,757	351,781,163
Additions to Property, Plant, and Equipment	\$ 38,795,352	20,825,345	20,232,414	13,262,892	15,385,548
Full-time Employees per					
Thousand Connections	2.89	2.89	2.89	2.87	2.84
Average Annual Water Charges for City Residential Customers based on 7,480 Gal. per month for 8 months and 40,000 Gal. for 4 months	\$ 470.75	473.74	473.74	479.64	511.60
Treatment Plant Costs/Acre of Water					
City Creek Treatment Plant	\$ 201.50	224.53	225.41	253.55	241.19
Parleys Treatment Plant	\$ 155.50	226.28	225.53	164.81	207.23
Big Cottonwood Treatment Plan	t \$ 62.50	68.9	77.89	91.78	76.30
Metropolitan Treatment Plant	\$	188.00	200.00		
Summer Rate	\$			322.00	332.00
Winter Rate	\$			116.00	120.00
Total Water Supplied in Millions Gal.	31,736.57	31,664.66	29,649.00	29,392.78	31,745.80
Ratio of Net Revenue to Aggregate Debt Service (minimum ratio 1.2	.5) 5.37	5.03	4.49	4.23	4.29

### **STORMWATER UTILITY**

	2008	2009	2010	2011	2012
Operating Revenue	\$ 5,353,189	5,433,240	6,239,616	7,734,631	8,215,799
Operating Expenditure	\$ -2,757,977	-3,653,826	-3,726,106	-3,927,524	-3,733,834
Depreciation and Amortization	\$ -2,179,493	-2,296,890	-2,349,776	-2,355,420	-2,454,689
Operating Income	\$ 415,719	517,476	163,734	1,451,687	2,027,276
Interest Income and Gain on Sales	\$ 503,851	227,566	67,963	51,367	148,733
Interest Expense (less capitalized)	\$ -130,835	-129,215	-84,666	29,284	-11,015
Contributions and Grants	\$ 3,426,695	2,579,618	2,424,615	1,789,990	416,980
Change in Net Assets	\$ 4,215,430	2,160,493	2,571,646	3,322,328	2,581,974
Total Property, Plant, and Equipment	\$ 88,111,865	90,287,275	93,099,444	97,279,378	104,510,146
Total Assets	\$ 99,896,271	101,576,096	104,455,360	110,304,601	117,788,172
Additions to Property, Plant, and Equipment	\$ 5,665,547	4,338,821	4,988,740	5,489,116	9,679,041
Full-time Employees per Thousand Connections	0.55	0.55	0.56	0.59	0.59
Average Annual Sewer Stormwater Charges for City Residential Customers	\$ 36.00	36.00	36.00	48.00	53.88

### WASTEWATER UTILITY

	2008	2009	2010	2011	2012
Operating Revenue	\$ 17,645,098	17,486,574	17,112,258	17,677,509	17,612,932
Operating Expenditure	\$-9,927,935	-9,850,196	-10,227,840	-11,911,166	-11,134,197
Depreciation and Amortization	\$ -3,752,229	-3,868,158	-3,957,809	-4,286,687	-4.796,210
Operating Income	\$ 3,964,934	3,768,220	2,926,609	1,479,656	1,682,525
Interest Income and Gain on Sales	\$ 1,392,768	749,301	576,535	222,344	307,456
Interest Expense (less capitalized)	\$ 92,732	92,732	92,732	92,732	92,732
Contributions and Grants	\$ 3,505,149	2,050,403	3,541,081	3,117,995	6,691,539
Change in Net Assets	\$ 8,955,583	6,660,656	7,136,957	4,912,727	8,774,252
Total Property, Plant, and Equipment	\$138,226,584	140,310,294	147,282,710	158,897,744	182,181,110
Total Assets	\$177,970,205	183,215,197	196,664,684	213,687,396	223,637,167
Additions to Property, Plant, and Equipment	\$ 7,309,369	5,110,637	10,055,393	13,786,052	28,122,817
Full-time Employees per Thousand Connections	2.03	2.03	2.02	2.02	2.11
Average Annual Sewer Charges for City Residential Customers	\$ 126.72	126.72	126.72	132.48	138.24

### **PUBLIC UTILITIES ADVISORY COMMITTEE**





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 through the department's service area, including the City of Holladay and Cottonwood Heights.

### **OF PUBLIC UTILITIES ADMINISTRATION**

Jeff Niermeyer, PE Director

**Thomas Ward, PE Deputy Director** 

James M. Lewis, CPA Finance Administrator

**Florence P. Reynolds** Water Quality Administrator

Charles H. Call, Jr., PE **Engineering Administrator** 

**Mark Stanley** Maintenance Superintendent

**Ralph Becker** Mayor

**David Everitt** Chief of Staff

**Edwin Rutan City Attorney** 

**Dale Christensen** Wastewater Facilities Manager

Nick Kryger GIS and IT Manager

Laura Briefer Water Resources Manager

Christy Cushing

Roger Player



Moore

Ke

**Rusty Vetter** Senior City Attorney

**Cindi Mansell City Recorder** 

Daniel Mulé **City Treasurer** 

#### **SALT LAKE CITY COUNCIL**

**Carlton Christensen** Luke Garrott Kyle LaMalfa Jill Remington Love Charlie Luke Stan Penfold Søren D. Simonsen







### SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES

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