

Sandy City Public Utilities Drinking Water ~ Storm Water & Street Lighting

City Council Budget Presentation

May 16, 2017

Public Utilities

Significant revenue & expenditure changes FY 2018

Drinking Water Enterprise

- ▶ \$10M bond and debt service
- ▶ Metro water purchases 5% rate increase: \$382,906

Storm Water Fund

- ▶ \$1,034,941 Debt service retired. Funds now go toward capital improvement program (pipe replacement, water quality, etc.)

Street Light Fund

- ▶ \$0.45 monthly increase for capital and operation.

Summary of Utility Revenue & Rates

| Utility Fund | Total Utility Fund Revenue | Rate Increase (Proposed 2018) | Average Residential Monthly Bill (2018) |
|--------------|----------------------------|-------------------------------|---|
| Water | \$22,198,401 | \$0.00 | \$56.43 |
| Storm Water | \$4,279,422 | \$0.00 | \$6.00 |
| Street Light | \$1,057,738 | \$0.45 | \$2.98 |

Drinking Water Enterprise

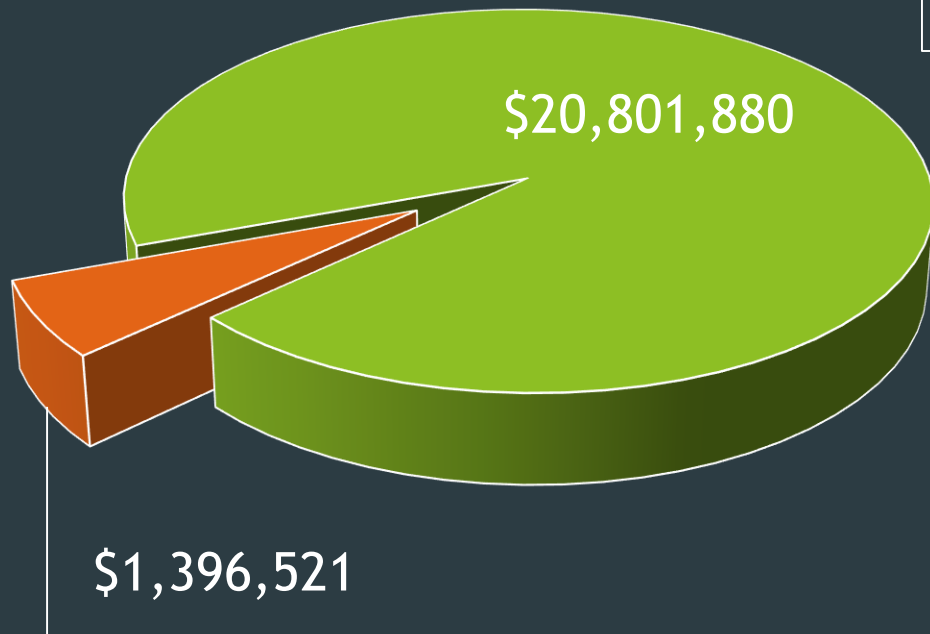
Drinking Water Enterprise

Level of service:

Performance Measures & Analysis

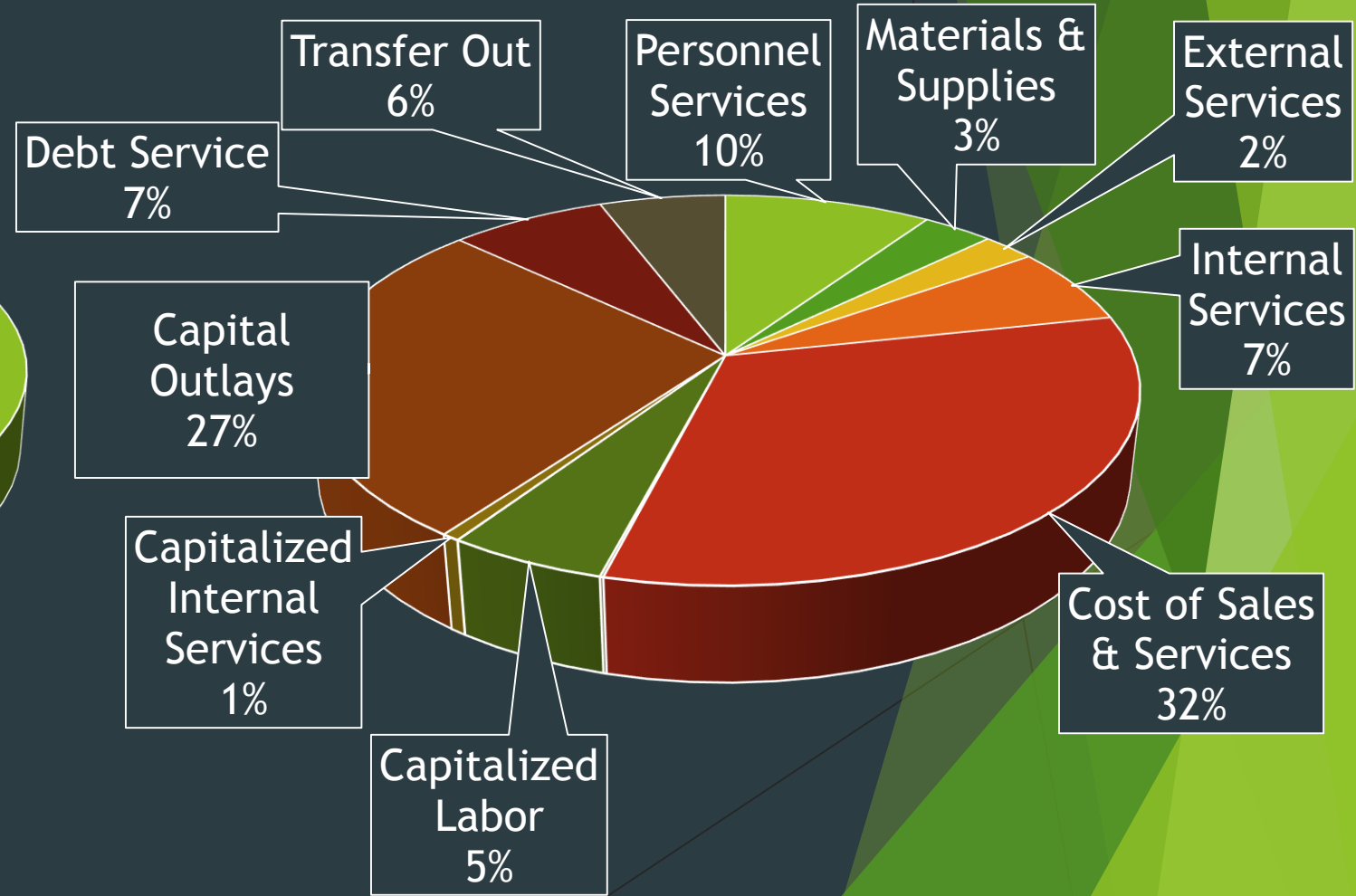
| Measure (Calendar Year) | 2014 | 2015 | 2016 |
|---|---------------|---------------|---------------|
| WATER SUPPLY INDICATORS | | | |
| Water Source Availability (in acre ft) | 37,700 | 37,700 | 37,700 |
| Metro Water (Deer Creek) | 7,940 | 7,940 | 7,940 |
| Metro Water (Little Cottonwood) | 7,880 | 7,880 | 7,880 |
| Metro Water (Ontario Drain Tunnel) | 3,000 | 3,000 | 3,000 |
| Jordan Valley Water | 0 | 0 | 0 |
| Bell Canyon | 880 | 880 | 880 |
| Municipal Wells* | 18,000 | 18,000 | 18,000 |
| Peak Production | | | |
| Amount (million gallons) | 65 | 65 | 58 |
| Capacity | 87 | 87 | 87 |
| Water Storage Capacity (million gls.) | 36.15 | 36.15 | 36.15 |
| Water Conservation | | | |
| Annual Production | | | |
| Metro Water | 10,683 | 21,475 | 17,468 |
| Municipal Wells* | 13,497 | 2,724 | 7,842 |
| Total Production | 22,448 | 24,199 | 25,310 |
| Annual Consumption (in acre feet) | 22,131 | 22,689 | 23,770 |
| Percent of Supply that is Consumed | 98.6% | 93.8% | 93.9% |
| Population Served | 86,791 | 90,642 | 92,914 |
| Per Capita Consumption (per day) | 228 | 223 | 228 |
| WATER QUALITY INDICATORS | | | |
| Customers reporting drinking water appearance, taste, or odor problems | 20 | 14 | 25 |
| Customers reporting pressure problems | 3 | 2 | 64 |
| Waterborne disease outbreaks or sicknesses where the water system was suspected | 0 | 0 | 0 |
| OPERATING EFFICIENCY INDICATORS | | | |
| Water Main Breaks | 48 | 69 | 69 |
| Employee Safety | | | |
| Lost Time Injuries | 0 | 0 | 0 |
| Recordable Injuries | 8 | 3 | 2 |
| Employee-Caused Traffic Incidents | 0 | 4 | 5 |
| Services satisfaction (from citizen survey conducted in December) (1-5 scale, 5=very satisfied) | | | |
| Utility billing system | 4.14 | NA | |
| Culinary (drinking) water services | 4.31 | NA | |

Drinking Water Enterprise Revenue



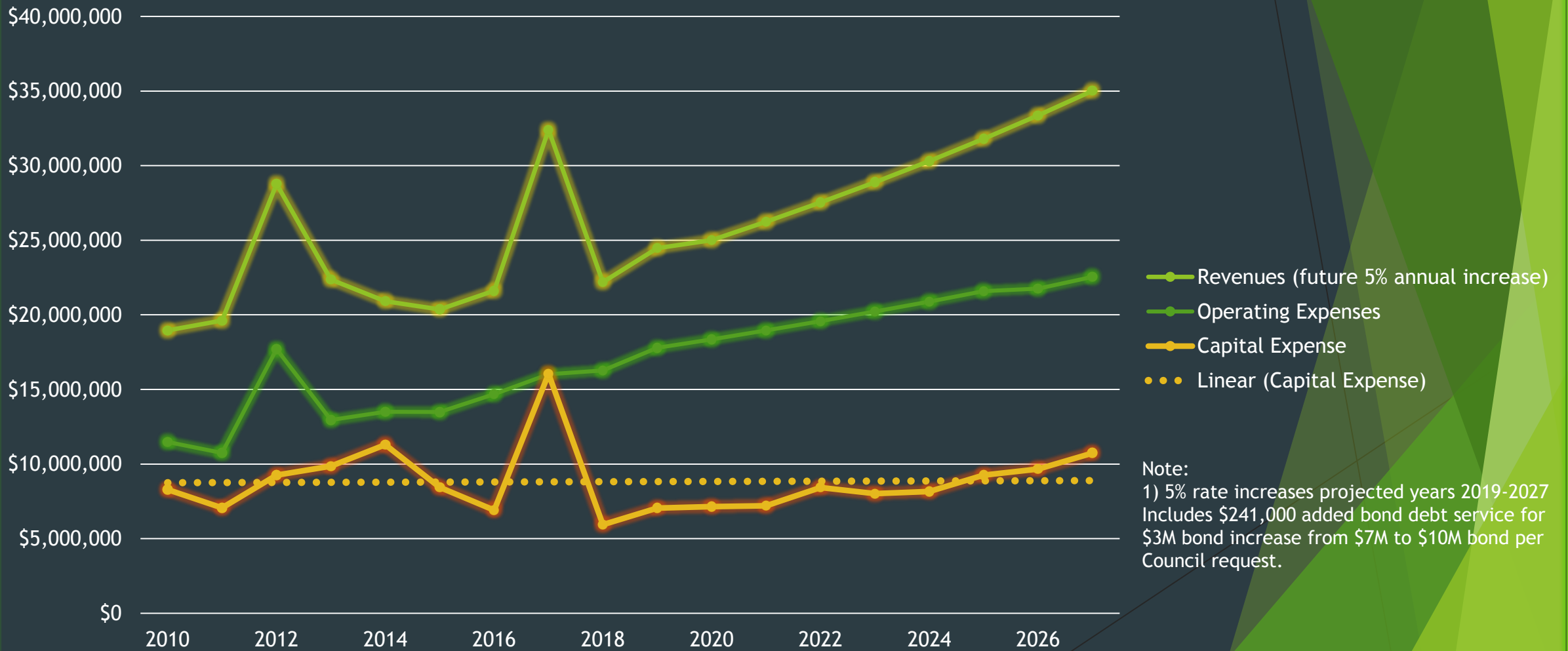
Utility Charges Other

Expenses



Revenue & Expense Summary (\$10M Bond)

Long Term Fund Summaries



Note:
1) 5% rate increases projected years 2019-2027
Includes \$241,000 added bond debt service for \$3M bond increase from \$7M to \$10M bond per Council request.

Water Budget Highlights

Operating Expenses

- ▶ Metro water purchases 5% rate increase: \$382,906
- ▶ Metro rate includes favorable change to flat fee for Sandy City water entitlement. Future expenses stabilized and allows Sandy better water resource management.

Water Capital Project Bonding

- ▶ \$7M bond and debt service for Flat Iron tank and well project.
- ▶ \$3M bond and debt service for master plan, land, and pipeline projects.

2018 Large Capital Projects

- ▶ \$4,201,322 Metro Capital Project Assessment
- ▶ \$400,000 for 10600 South Zone 5 20-inch pipeline project
- ▶ \$120,000 Dry Creek water quality and conservation education demonstration garden
- ▶ \$757,417 Mainline Replacement
- ▶ \$150,000 Well Infrastructure Replacement



2010 Water Master Plan Projects

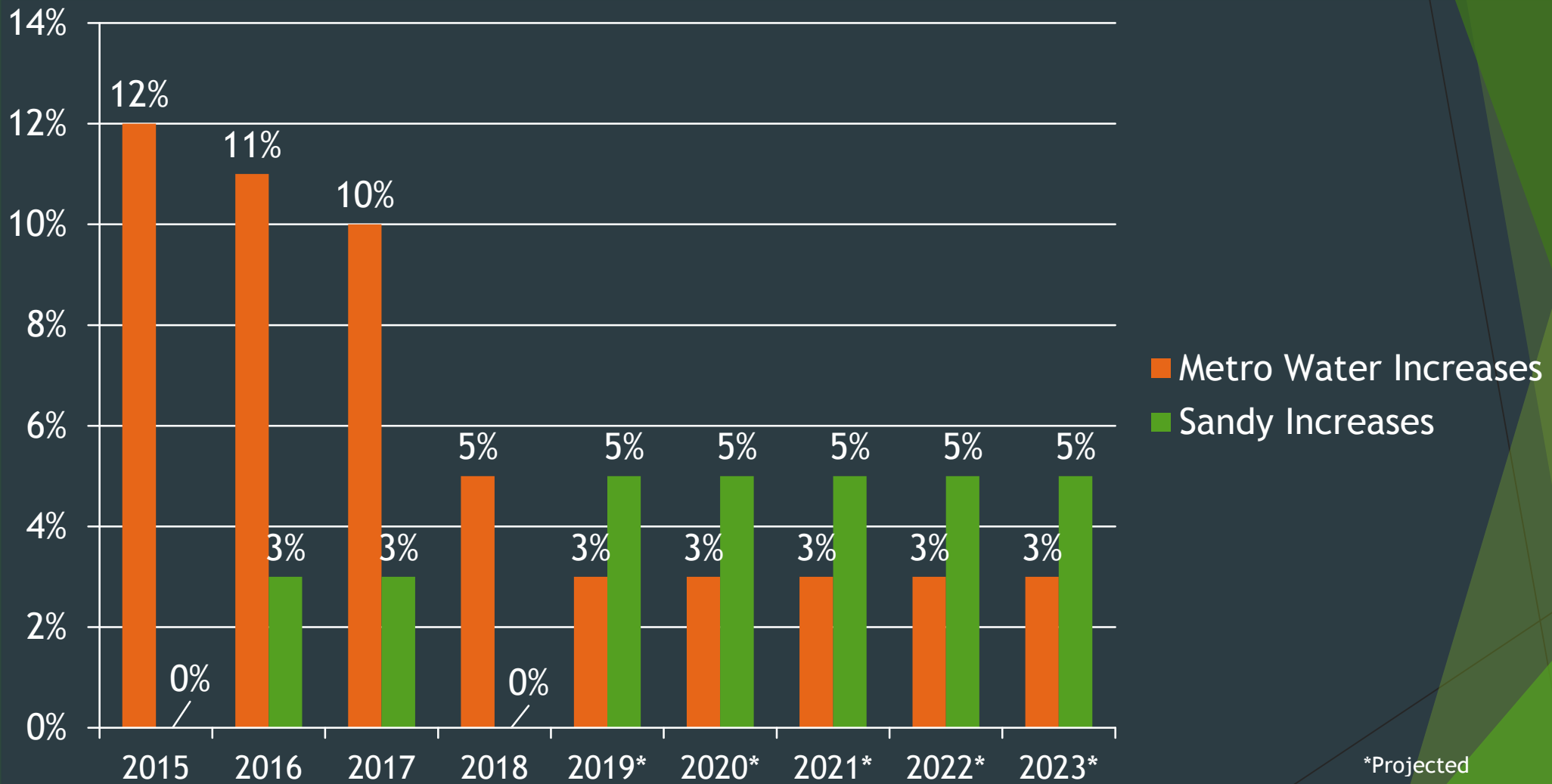
10 Year Water Projects Summary -(Projects Greater that \$500,000)

| Est. FY | Project Description | Quantity | Unit | Unit Cost | Construction Cost (25% Contingency) | Engineering | Total Project Cost Estimate (Actual If Known) |
|---------|---|----------|--------|-----------------|---|---------------|---|
| | Mainline Replacement (3% increase annually) | | YR | \$ 1,500,000.00 | | | \$ - |
| | Maintenance - Wells, Booster & Tanks | | YR | \$ 300,000.00 | | | \$ - |
| 2012 | Severson Well House Replacement | 1 | Actual | | \$ 924,955.00 | \$ 95,574.00 | \$ 1,020,529.00 |
| 2012 | High Bench Booster Replacement Project | 1 | Actual | | \$ 1,441,171.54 | \$ 151,800.00 | \$ 1,592,971.54 |
| 2012 | 500 West Waterline Project | 1 | Actual | | \$ 949,685.00 | \$ 71,487.97 | \$ 1,021,172.97 |
| 2013 | 9000 South Waterline Replacement Project | 1 | Actual | | \$ 72,700.00 | \$ 440,000.00 | \$ 512,700.00 |
| 2013 | Pepperwood Tank Replacement | 1 | Actual | | \$ 4,235,514.55 | \$ 283,550.00 | \$ 4,519,064.55 |
| 2014 | 9400 South - I-15 Crossing Waterline Crossing | 1 | Actual | | \$ 424,317.20 | \$ 31,939.85 | \$ 456,257.05 |
| 2016 | 700 East Waterline Replacement Project (7800 South to 8600 South) | 1 | Actual | | \$ 1,312,288.00 | \$ 29,100.00 | \$ 1,341,388.00 |
| 2017 | 1300 East from 8600 South to 7800 South Waterline Improvements | 1 | Actual | | \$ 549,000.00 | \$ - | \$ 549,000.00 |
| 2017 | Replace Flat Iron Tanks with One 5 MG Concrete Tank | 1 | LS | \$ 3,700,000.00 | \$ 4,625,000.00 | \$ 231,000.00 | \$ 4,856,000.00 |
| 2019 | 10600 South (Zone 5) 20" Transmission Line and PRV Adjustments | 4500 | LF | \$ 200.00 | \$ 1,125,000.00 | \$ 56,000.00 | \$ 1,181,000.00 |
| 2019 | Flat Iron Well (Drilling and Wellhouse) | 1 | LS | \$ 2,200,000.00 | \$ 2,750,000.00 | \$ 138,000.00 | \$ 2,888,000.00 |
| 2021 | Boring For Waterline Under I-15 North of 9000 South | 1600 | LF | \$ 750.00 | \$ 1,500,000.00 | \$ 75,000.00 | \$ 1,575,000.00 |
| 2022 | High Bench/A-1 Transmission Line | 10000 | LF | \$ 225.00 | \$ 2,813,000.00 | \$ 141,000.00 | \$ 2,954,000.00 |
| 2024 | 16" Line along 10000 South from 700 East to Trax Line | 3600 | LF | \$ 325.00 | \$ 1,170,000.00 | \$ 59,000.00 | \$ 1,229,000.00 |
| 2026 | MWDSLS Falcon Connection and Zone 3N Improvements | 1 | LS | \$ 1,000,000.00 | \$ 1,250,000.00 | \$ 63,000.00 | \$ 1,313,000.00 |
| 2027 | New 5 MG Hand Tank and Miscellaneous Improvements | 1 | LS | \$ 7,000,000.00 | \$ 8,750,000.00 | \$ 438,000.00 | \$ 9,188,000.00 |

Annual Projects
 Completed
 In Design

Added bond funded projects

Proposed Future Water Rate Increases



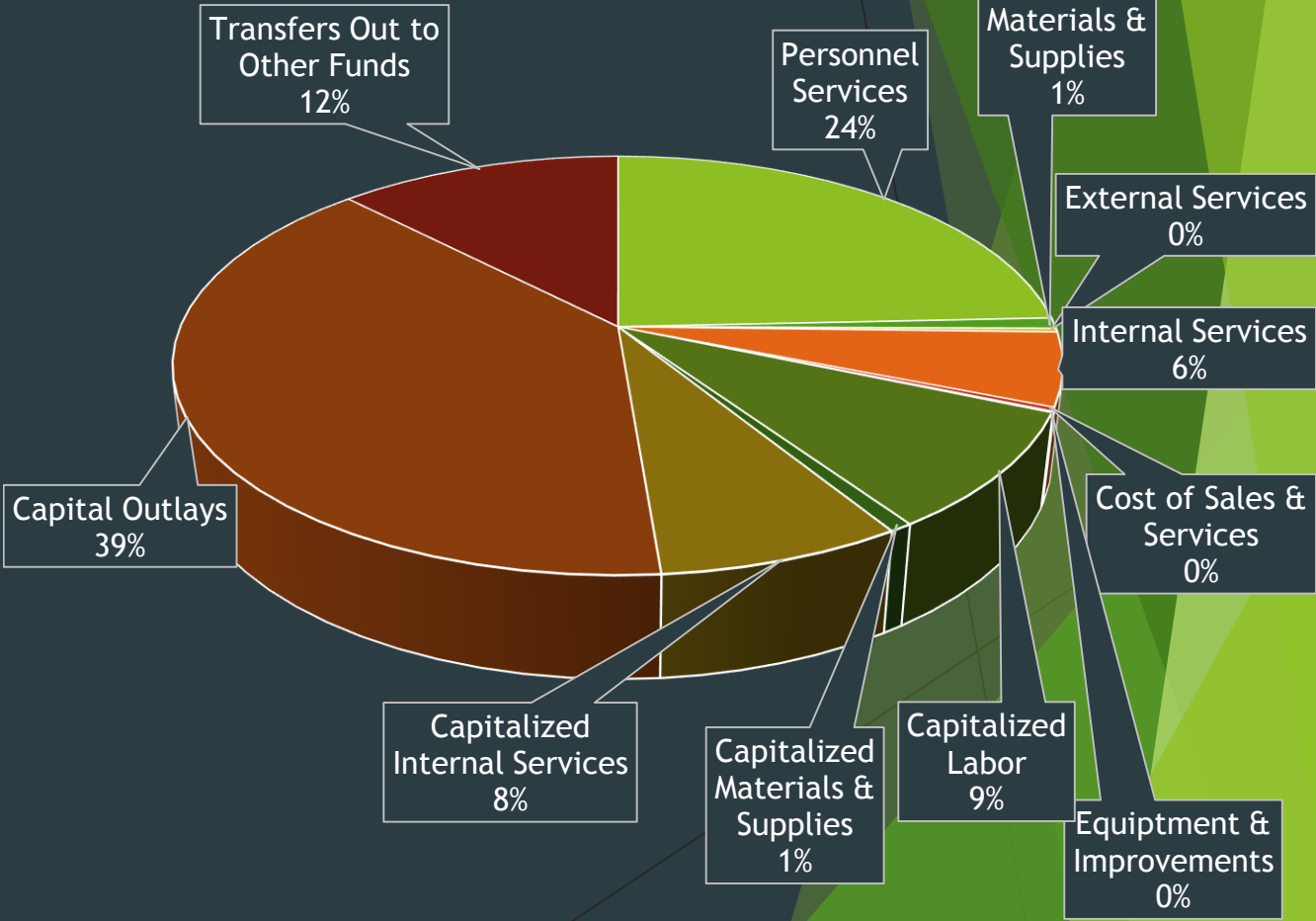
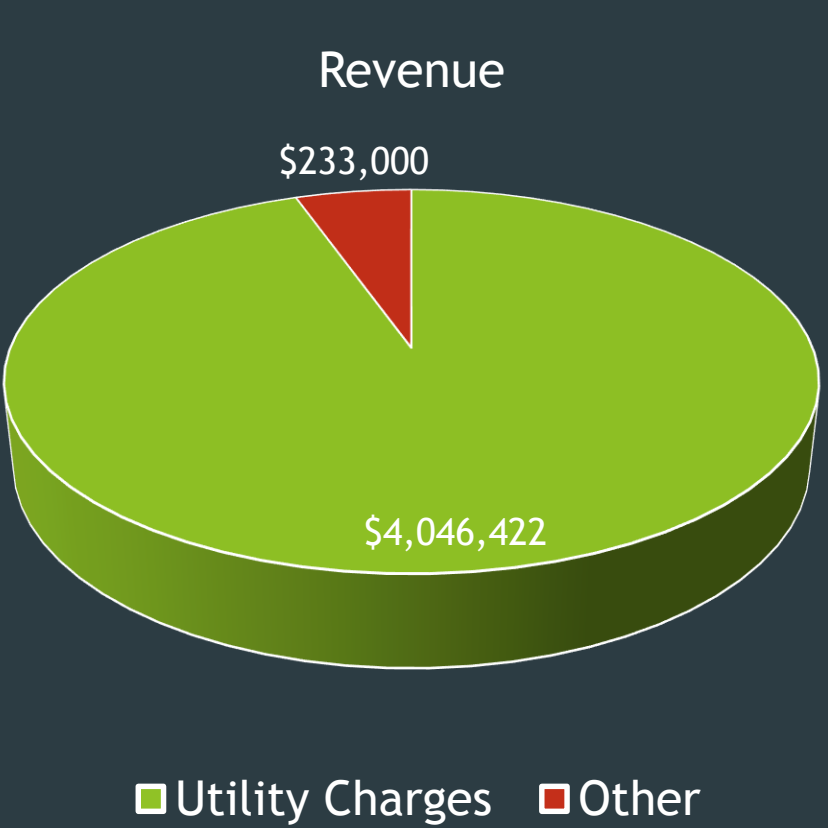
Level of service expectations:

► Competitive Water Rates

| Entity | Monthly Average |
|-----------------------------------|-----------------|
| 1 Draper City Zone 3 | \$104.62 |
| 2 Draper City Zone 2 | \$82.68 |
| 3 Draper City Zone 1 | \$79.94 |
| 4 Kearns | \$79.76 |
| 5 Magna | \$78.61 |
| 6 Salt Lake City (County) | \$73.52 |
| 7 South Jordan Area C | \$71.69 |
| 8 South Jordan Area B | \$70.12 |
| 9 South Jordan Area A | \$68.49 |
| 10 Herriman City | \$65.63 |
| 11 Sandy City (County) | \$65.30 |
| 12 Riverton City | \$64.66 |
| 13 White City | \$62.70 |
| 14 Bluffdale | \$62.27 |
| 15 Sandy City | \$56.43 |
| 16 Salt Lake City | \$54.75 |
| 17 Water Pro Area 4 | \$54.53 |
| 18 Granger-Hunter | \$52.68 |
| 19 Water Pro Area 1 | \$52.10 |
| 20 Water Pro Area 3 | \$51.39 |
| 21 Jordan Valley WCD Willow Creek | \$51.13 |
| 22 Midvale Area 3 | \$50.93 |
| 23 Water Pro Area 2 | \$50.41 |
| 24 Water Pro Area 5 | \$48.85 |
| 25 Jordan Valley WCD Riverton | \$48.39 |
| 26 West Jordan | \$47.95 |
| 27 Jordan Valley WCD | \$44.67 |
| 28 Taylorsville-Bennion | \$43.73 |
| 29 Midvale City Area 2 | \$43.01 |
| 30 Murray City | \$38.81 |
| 31 Midvale City Area 1 | \$36.35 |

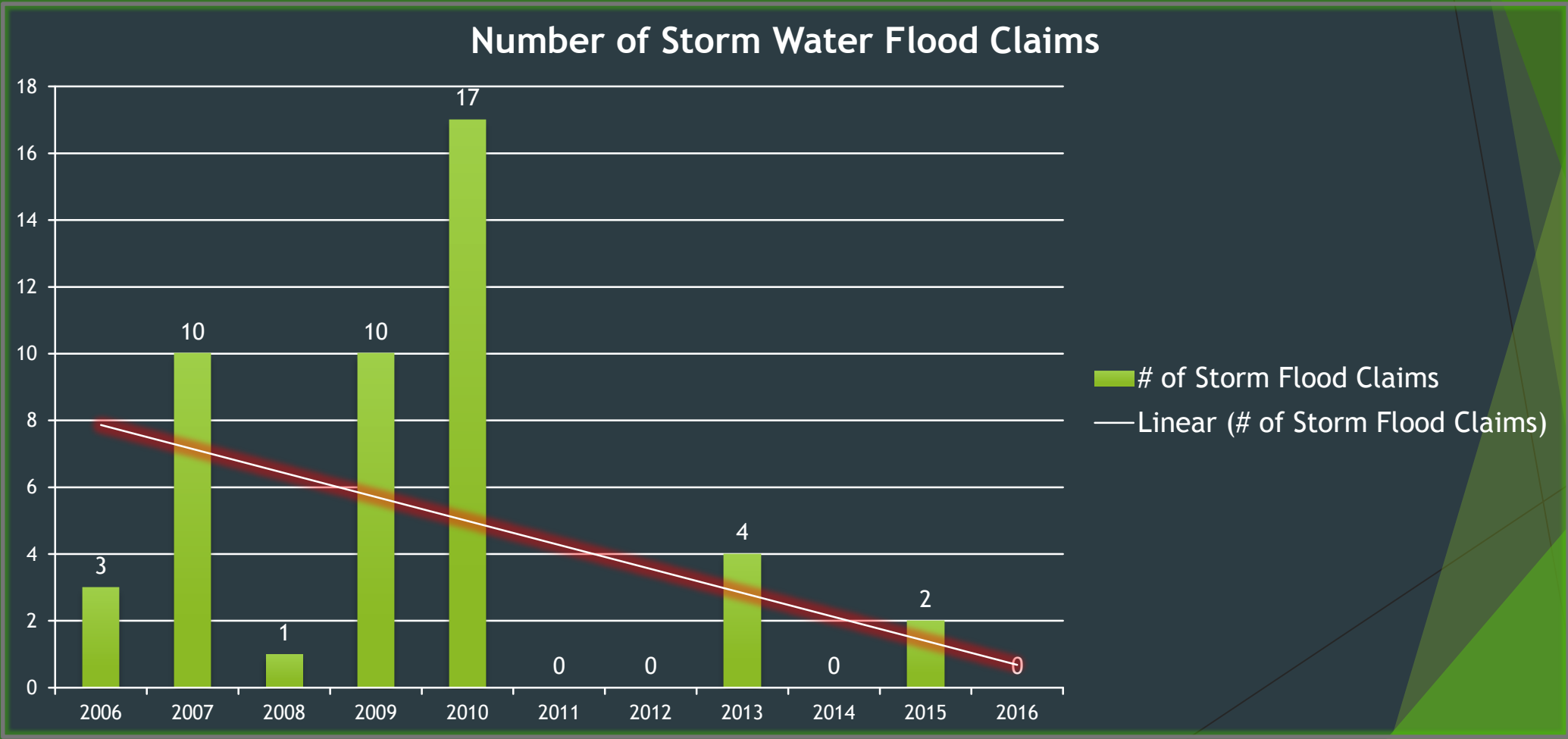
Storm Water Utility

Storm Water Revenue & Expenditures



Level of service trends: Storm Water

Reduced flooding claims due to sustained capital improvement program



Budget Highlights

Storm Water Capital Projects

- ▶ Two New SCADA sites - \$30,000
(Aspen Meadows 210 E 9800 S Home Depot 11400 S State)
- ▶ Corrugated Metal Pipe (CMP) Replacement \$300,000
- ▶ Bryce Drive* \$200,000
- ▶ Wildflower Drive Bypass* \$420,000
- ▶ Sandy Canal \$250,000
- ▶ Dry Creek Flood Control and Water Quality \$120,000
- ▶ Neighborhood Projects \$286,049

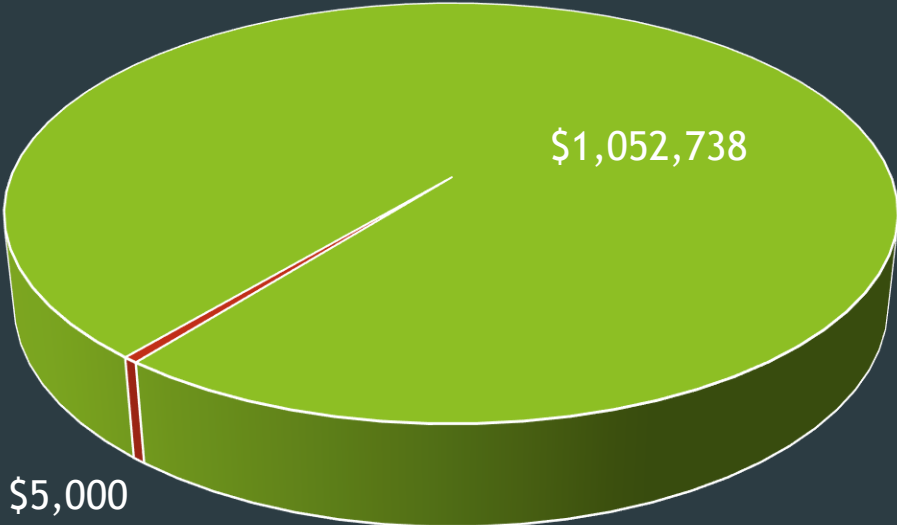
*Saving money for future projects



Street Light Utility

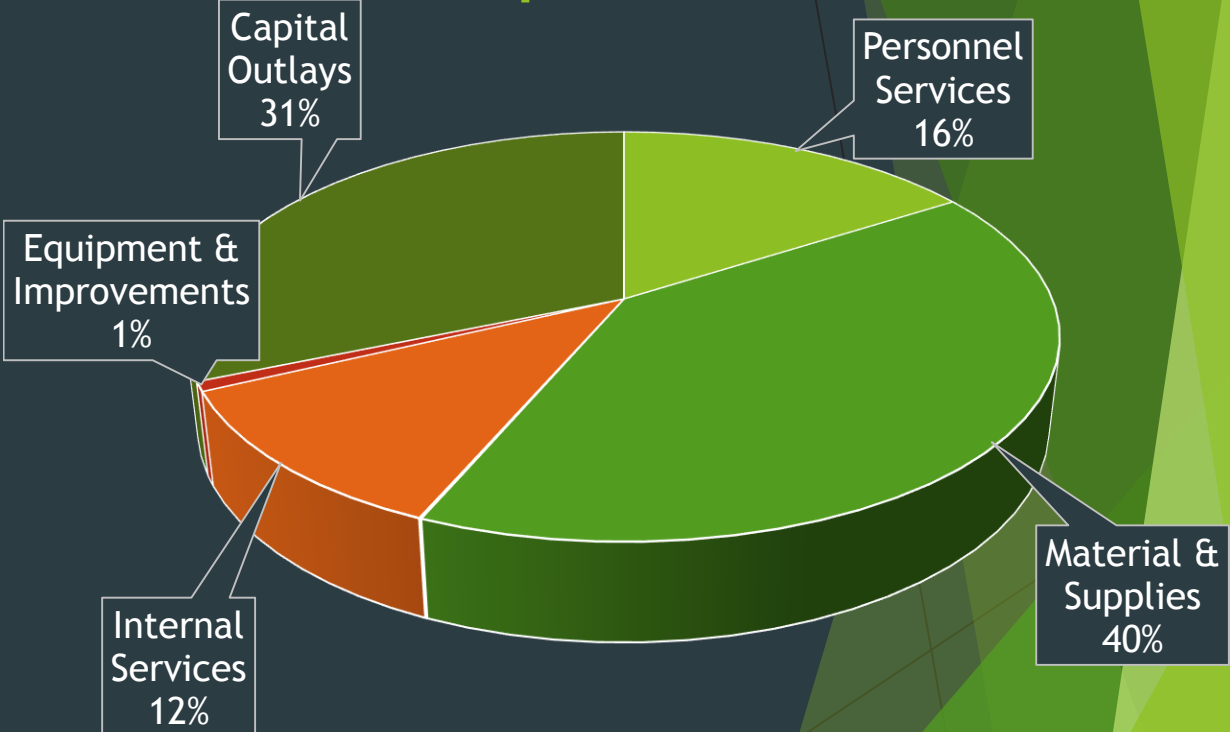
Street Light Fund

Revenue



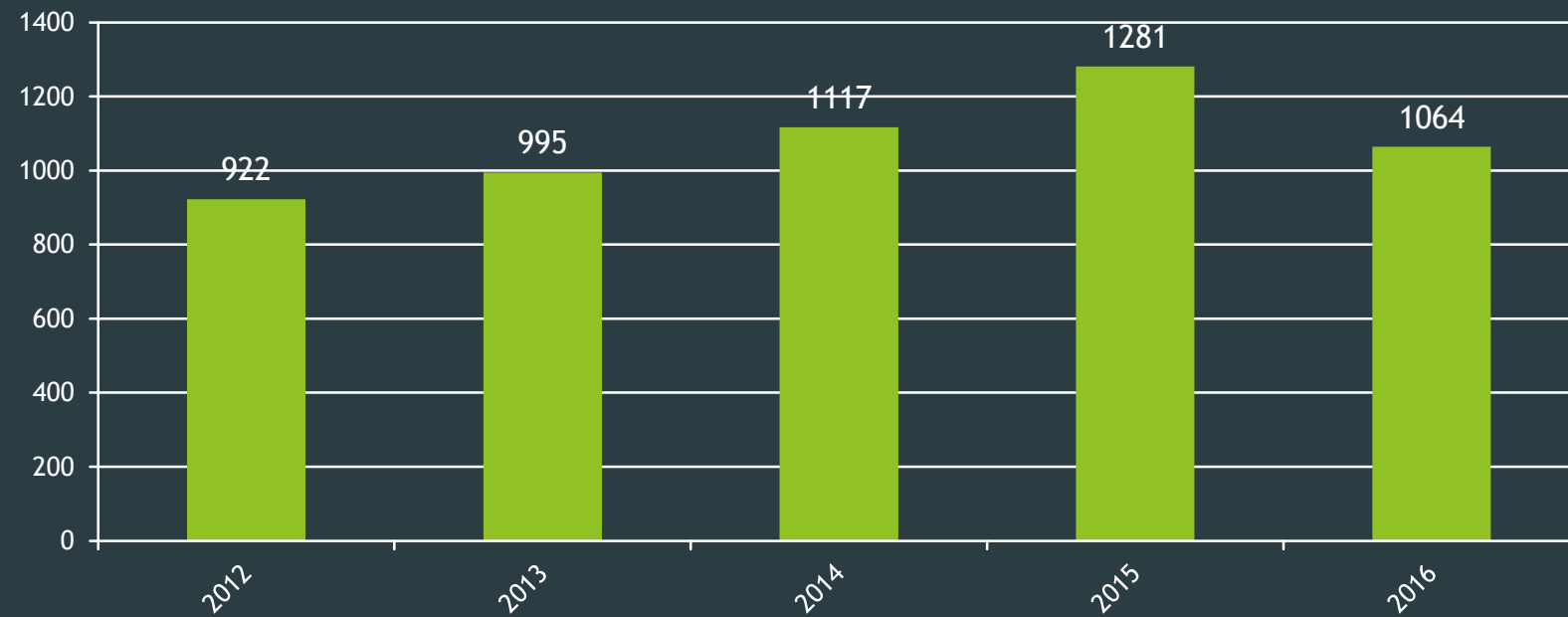
Utility Charges Other

Expenses



Level of service: Street Lights

Street Light Repairs Annually



Budget Highlights

Street Light Capital Projects

FY 2018 funding \$378,329

- ▶ Master Plan upgrades
- ▶ LED high efficiency upgrades (pursuing Rocky Mountain Power grant rebates). Reduces power costs over time.
- ▶ Downtown Cairns lighting



Future Challenges: Street Light Fund

Master Plan and Rate Study update prior to 2019 budget

- ▶ Maximize efficiency, customer service levels and leverage funding
- ▶ Current revenue generates \$228,526 annual for capital funding.
- ▶ Total Capital Needs \$16,455,599
 - ▶ Filling in lights with current gaps \$6,923,724
 - ▶ High efficiency light (LED) upgrades \$5,000,000*
 - ▶ Downtown Cairns lighting = \$4,531,875

Funding Strategies:

- ▶ City is pursuing grant funding and Rocky Mountain Power rebates
- ▶ Cairns committee evaluating options for downtown capital and O&M needs such as special assessment area, central business district, enhanced lighting fee, etc.

Future Challenges & Strategic efforts for 2018

- ▶ Asset Management Program Update
 - ▶ Review critical assets, condition, risk of failure, and prioritization of future capital needs for continued “smart” investment of funds. Use new technology for inspection / repair (laser surgery vs saw) of water and storm water system project prioritization. “Every pipe has a plan”
 - ▶ Strategic technology savings. Staff saved \$400k +/- with insitu centrifugal cast concrete lining of 60-inch corroded CMP pipe rehabilitation over open cut trench replacement
 - ▶ GIS and non-destructive tools such as satellite and aerial water imaging to detect leaks and repair prior to main break (saves \$30 to \$300k or more per break)
- ▶ 2018 Update Master Plans and Rate studies
 - ▶ Study street light funding/fees for capital needs and higher level of service areas (downtown Cairns)
 - ▶ Drinking water rate increases required for Metro and City capital bond funding
 - ▶ Storm water - Dry Creek Flood Control project and CMP corroded pipe rehab program funding
- ▶ Continue pursuit of grant and partner funding of flood control, drinking water and street light capital needs (Salt Lake County, Utah DEQ, Rocky Mountain Power grants, development, etc.)
- ▶ Energy efficiency evaluation and improvements to save power, save money, and reduce greenhouse gas emissions (eg. LED lighting upgrades, water system efficiencies)

Thank you!

Questions?

