

2016 – 2021 Draft Capital Facilities Plan

Drinking Water, Wastewater and
Storm and Surface Water Utilities

Utility Advisory Committee
June 4, 2015

Topics

- Background
- Review of projects and their costs
- Next steps
- Potential UAC recommendations

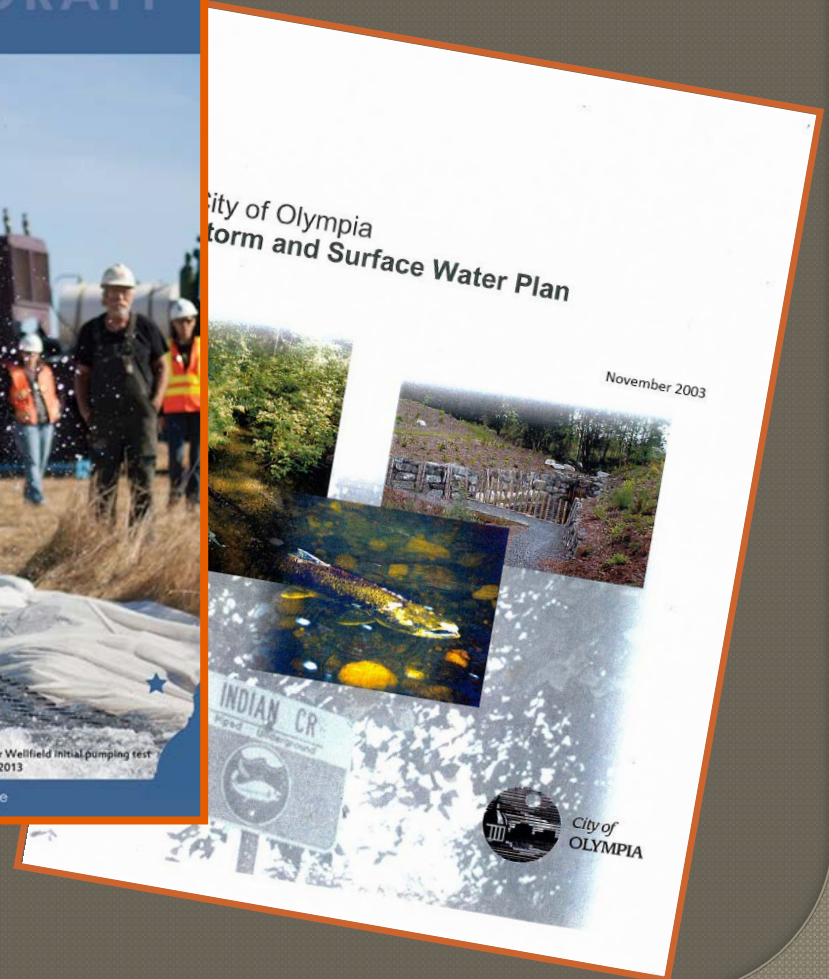
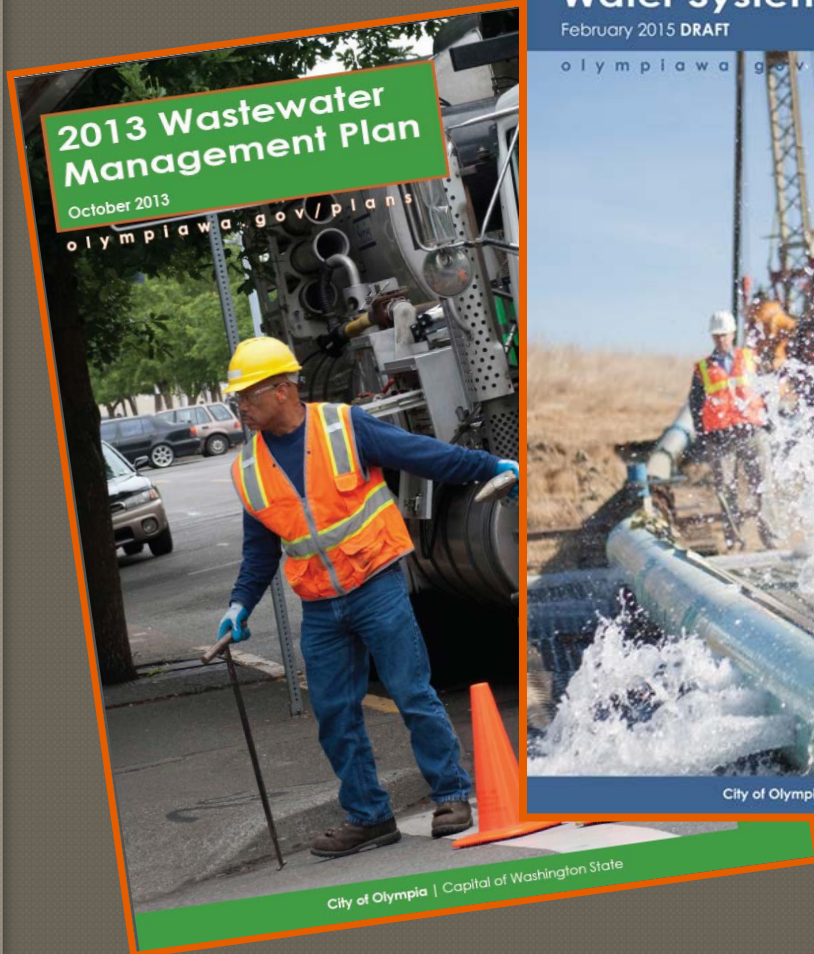
CFP Background

- 6-year plan with annual updates
 - First year is authorized by City Council to proceed
 - Also conceptual 20-year plan
- Required by State Growth Management Act
 - Becomes part of the City Comprehensive Plan
- Covers Water Resource utilities as well as Transportation, Parks, and General Government
 - Separate funding with project coordination
- Key element of overall Utility finances
 - Roughly 1/3 of annual budgets
 - Rate implications

Capital Facility Planning

- Approach
 - Meet public health, safety, and natural resource responsibilities
 - Balance needs with affordability
 - Take care of current and likely future problems
 - Incorporate sustainability concepts
 - Foster community pride and sense of place

Incorporating Utility Master Planning



Prioritizing Projects

- State and Federal mandates
- Master Plan objectives
- Coordination with other projects (Transportation)
- Environmental stewardship
- Safety and emergency preparedness
- Innovation
- Proactive maintenance
- Opportunity
- Operations & maintenance costs

Drinking Water Utility



Overview

- New Water System Plan under review
 - Good understanding of capital needs
- Comprehensive Utility financial analysis completed last year
 - Rates, bonds, loans, and postponement
- Continued costly projects
 - \$11.9 M water reservoir loan: 7.5% rate increase

Recent Big Accomplishments

- McAllister wellfield development and transmission main
 - 50 year plus supply
- Water service meter replacement
 - 19,695 meters
- Log Cabin reservoir design underway



2016 Project Summary

Major work efforts

- Corrosion control treatment (\$3.3 M)
 - Likely State loan application
- Pump station rehabs (\$2.2 M)
- Pipe replacements (\$1 M)
- Morse-Merryman roundabout pipe extension (\$820,000)
- McAllister wellfield mitigation (\$235,000)
- Groundwater protection(\$332,000)
- Misc projects/planning (\$450,000)
- Reclaimed water (0)



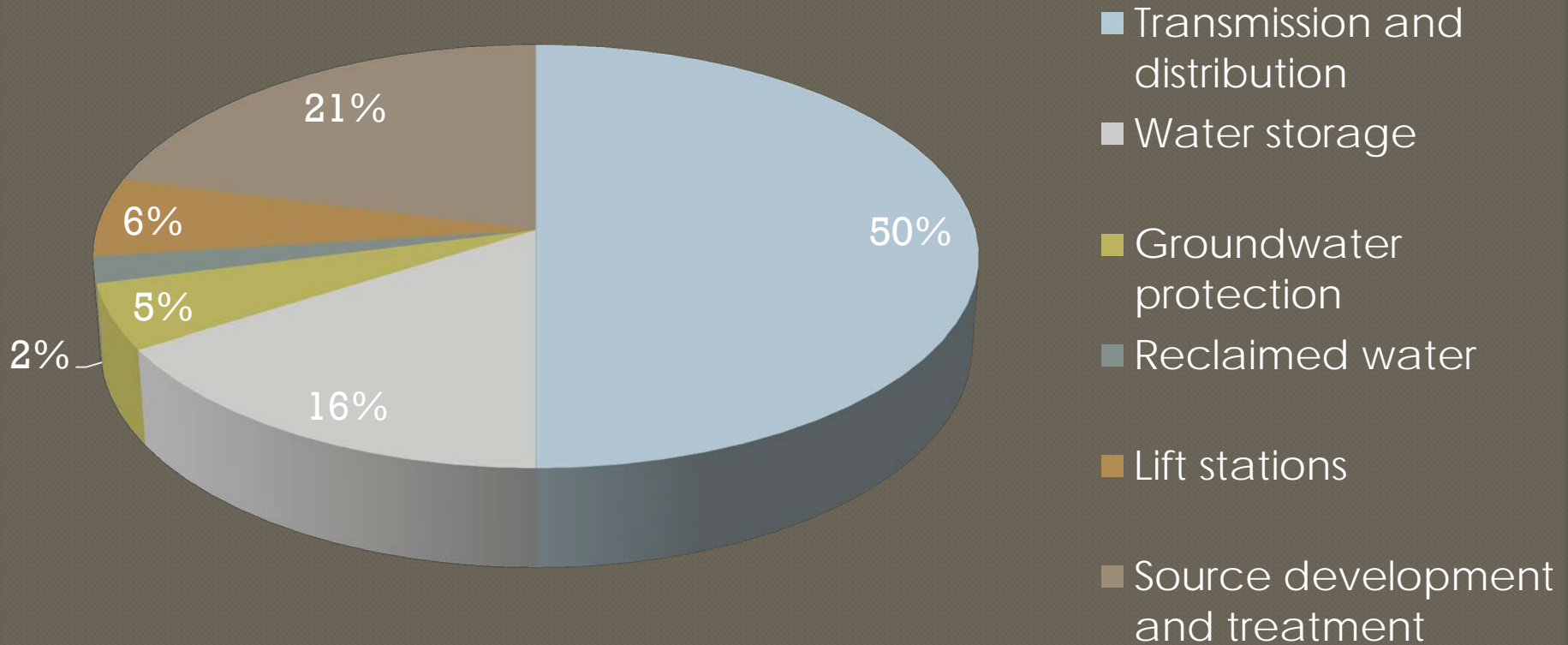
Specific 2016 Drinking Water Projects

Projects	2016 Funding
Asphalt Overlay	\$11,000
Small Diameter Water Main	\$525,000
Fones Road Booster Station Replacement	\$1,285,000
AC Pipe Replacement- Boulevard Rd Roundabout at Morse Merryman Rd	\$820,000
Distribution System Oversizing	\$28,000
Percival Bridge Stabilization Creek Watermain	\$100,000
West Bay Booster Station Pump and Electrical Upgrade	\$520,000
AC and Aging Pipe Replacement	\$525,000
Eastside Booster Station Upgrade	\$322,000
Distribution Main Condition Assessment	\$26,000
Cross Country Mains	\$26,000
Asset Management Program	\$53,000
On-site Generator Replacement Plan	\$79,000
Corrosion Control (aeration) Tower Condition Assessment & Upgrades	\$26,000
PRV Telemetric (Radio Base)	\$53,000
McAllister Wellfield Corrosion Control Treatment	\$3,300,000
McAllister Wellfield Mitigation - Deschutes River	\$220,000
McAllister Wellfield Mitigation - Woodland Creek	\$15,000
Indian Summer Well Chlorination	\$158,000
Shana Park Source Contingency Plan Well Water Quality Study	\$158,000
Groundwater Protection (Easements, Appraisals Etc.)	\$16,000
Groundwater Monitoring Wells	\$158,000
Pre-Design and Planning	\$22,000

Drinking Water Proposed 6-Year CFP

Year	Proposed CFP Funding
2016	8,430,000
2017	5,777,000
2018	2,017,000
2019	2,111,000
2020	4,750,000
2021	1,731,000
TOTAL	24,816,000

6-Year DW Funding Distribution



Drinking Water Summary

- CFP is consistent with current and potential future Water System Plan
- Key projects need to move forward
- More and more energy into priority setting and financial management
- Continued rate implications

Wastewater Utility



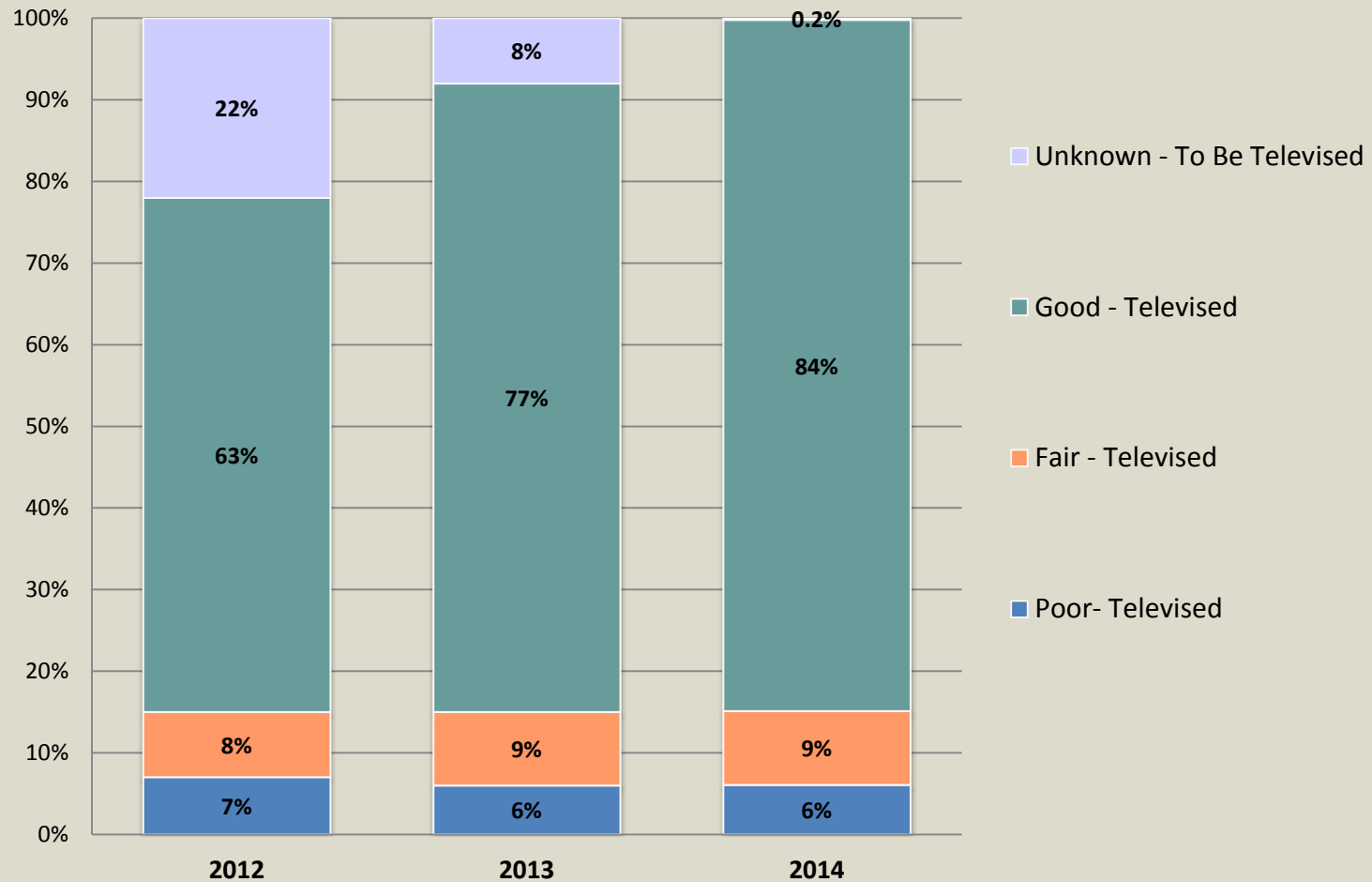
Wastewater CFP

- 2013- 2018 Wastewater Management Plan
 - Being implemented ...straightforward
- Key infrastructure responsibilities
 - Pump station upgrades
 - Existing pipe repairs and upgrades
 - Occasional new pipe extension
 - Onsite septic system conversions

Overview

- Modest future needs
 - Keep up with pump stations retrofits
 - Repair pipes
 - Facilitate septic system conversions
 - Could become a bigger program
- Expect rate-based finances
 - Minimal or no loan and bond funding
- Televising and condition rating of pipe system complete

Wastewater Condition Rating



Specific 2016 Waste Water Projects

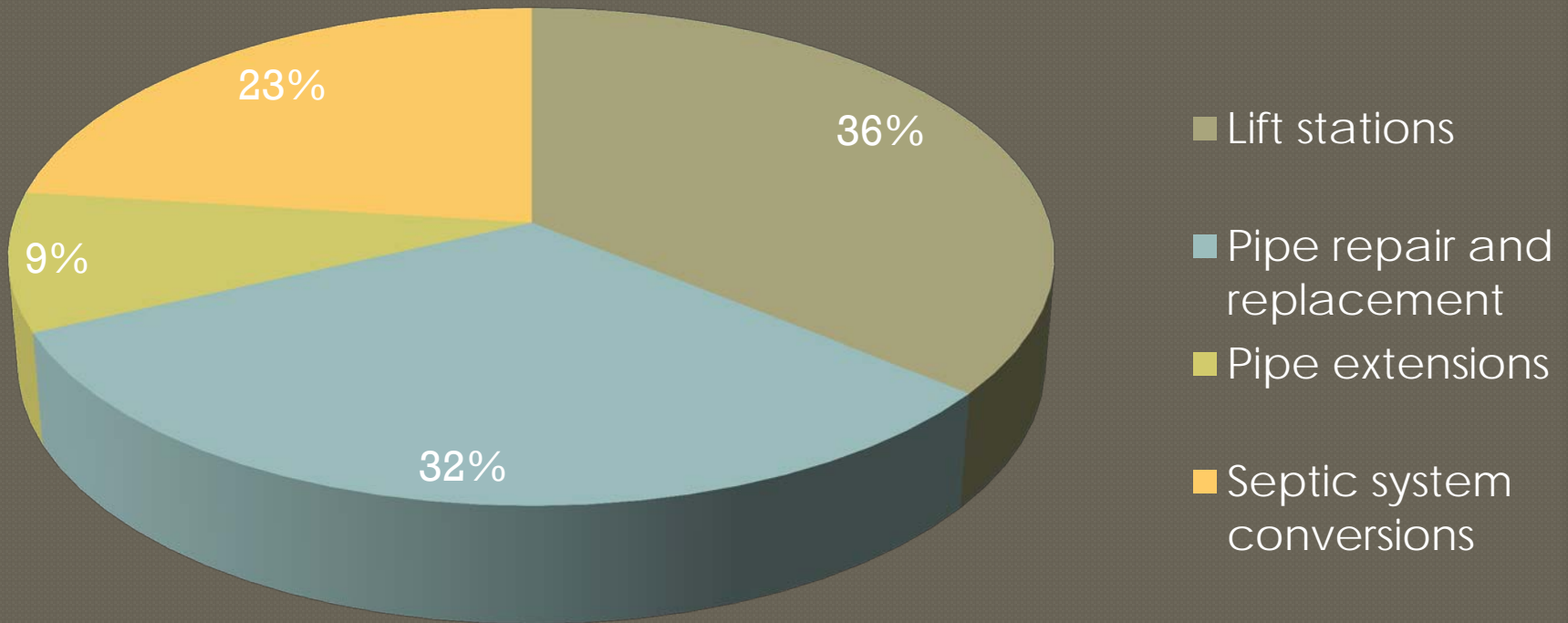
Projects	2016 Funding
Asphalt Overlay	\$11,000
Spot Repairs	\$105,000
Percival Bridge Stabilization	\$200,000
SE Area Odor and Corrosion Control	\$100,000
Old Port I Lift Station Upgrade	\$630,000
Sewer System Televising and Condition Rating Program	\$22,000
Boulevard Sewer Extension at Morse Merryman RAB	\$788,000
Annual Sewer Extensions	\$158,000
Pre-Design	\$39,000

Wastewater

Proposed CFP Funding – By Year

Year	Proposed CFP Funding
2016	1,895,000
2017	2,347,000
2018	1,663,000
2019	1,243,000
2020	1,201,000
2021	1,243,000
TOTAL	9,592,000

6-Year WW Funding Distribution



Wastewater Summary

- CFP is consistent with the Wastewater Management Plan
- High level of knowledge regarding infrastructure condition and integrity
- Proactively rehabing older pump stations
- No needs for pipe capacity upgrades; one major pipe extension
- Onsite septic system conversions being addressed regionally

Storm and Surface Water Utility



Storm and Surface Water CFP

Responsibilities

- Flooding
- Water quality
- Aquatic habitat



Overview

- Need to update the 2003/2010 Storm and Surface Water Management Plan
 - Goals, level of service and finances
 - Broad responsibilities
- Using State grants and loans for water quality retrofits
 - Expensive - \$0.75 – \$1.25 M/project
- Pipe televising and condition rating over half complete

Stormwater Pipe Condition Rating

Goal:

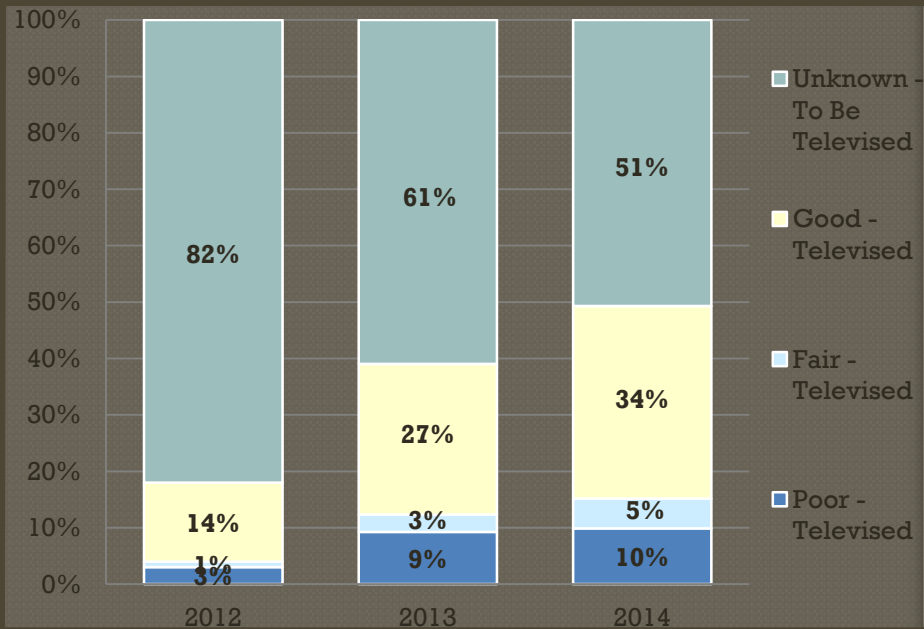
Repair or replace deteriorating pipes so that flood risks, emergency response, and unanticipated construction costs are minimized.

Measure:

Complete system rating by 2020

Analysis:

- 395,500 feet rated since 2010 (49%)
 - Can meet or exceed annual goal of 60,000
- Likely problem pipes prioritized for rating.
- Some systems difficult to clean and televise, but overall condition not bad.
- Supports improved infrastructure mapping.



Actions:

- Program well established.
- Spot repair program underway.
- Coordinate sweeper route with catch basin cleaning and pipe cleaning for cost savings.
- Televiser pipes after O & M structure cleaning for additional cost savings.

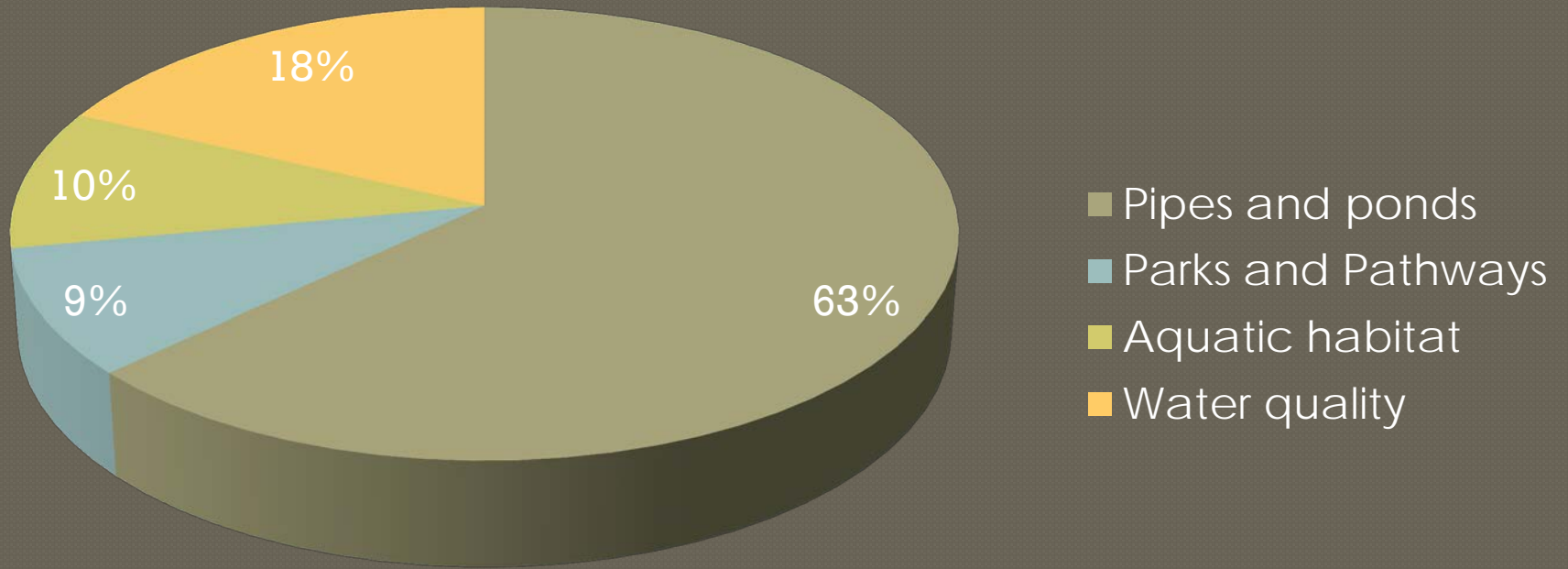
Specific 2016 Storm and Surface Water Projects

Projects	2016 Funding
Asphalt Overlay Adjustments	\$186,500
Land Acquisition/Stewardship/Enhancement	\$250,000
East Bay Water Quality Retrofit	\$761,300
Conveyance Spot Repairs (Pipe Replacement)	\$79,000
Condition Rating Existing Conveyance	\$142,200
Public Pond Rehabilitation ("City Owned Stormwater Pond Rehab")	\$10,000
North Percival Facility Modifications	\$288,300
Pervious Pavement Contingency Fund	\$28,400

Storm and Surface Water Proposed CFP Funding by Year

Year	Total Proposed CFP Funding
2016	1,745,700
2017	4,181,100
2018	1,878,700
2019	2,226,500
2020	1,650,400
2021	1,411,100
TOTAL	13,093,500

Storm & Surface Water Projects



Storm and Surface Water Summary

- Maintaining infrastructure
 - Need better vegetation mgmt. through operating budgets
- Continuing to pushing flood mitigation projects out
- Funding habitat stewardship
- Assuming successful water quality retrofit grant and loan funding
- Need long-range planning...after we get low impact development code revisions on their way

Next Steps - 2016 CFP Process

- July 8 - City Council Finance Committee - Preliminary CFP
- August/September - Planning Commission public hearing
- October/November - Council discussion and public hearing
- December 2014 - Council adoption

UAC Recommendations

- Consistent with Utility management plans?
- Appropriate priorities?
- Financially viable?
- Long-term responsibilities?

Questions and Discussion



Program	Appropriation Year	Project Name	Anticipated Appropriation	Portion of Total Funded by GFC	Project Location
Asphalt Overlay Adjustment	2016-2021	Asphalt Overlay Adjustments	\$66,000		CityWide
Groundwater Protection	2016/2018/2020	Groundwater Protection (Easements, Appraisals, etc.)	\$48,000		CityWide
Land Acquisition	2016-2018	Groundwater Monitoring Wells	\$578,000		CityWide
	2017-2018	Wellhead Protection Program	\$421,000		CityWide
Infrastructure Pre-Design and Planning	2016-2021	Pre-Design and Planning	\$132,000		CityWide
Reclaimed Water	2018	Port of Olympia - Eliminate Northern Dead End	\$50,000		DT
	2020	Reclaimed Water Infrastructure	\$263,000		CityWide
	2020	Reclaimed Water Filling Stations	\$105,000		CityWide
Small Diameter Water Pipe Replacement	2016-2021	Small Diameter Water Pipe Replacement	\$3,150,000		CityWide
	2016	AC Pipe Replacement—Boulevard Rd Roundabout at Morse Meryman	\$820,000		SE
	2016	Eastside Booster Station Upgrade	\$322,000		NE
	2016	Fones Rd Booster Station Replacement	\$1,285,000		SE
	2016	Percival Bridge Stabilization	\$100,000		NW
	2016	PRV Telemetry (Radio-based)	\$53,000		CityWide
	2016	West Bay Booster Station Pump and Electrical Upgrade	\$520,000		NW
	2017	Kaiser Rd Watermain Extension to Evergreen Park Drive	\$598,500	\$199,500	SE
	2017	McCormick Valve House	\$158,000		NE
	2016-2021	AC and Aging Pipe Replacement	\$3,150,000		CityWide
Transmission & Distribution Projects	2016-2021	Asset Management Program	\$318,000		CityWide
	2016-2021	Cross Country Mains	\$156,000		CityWide
	2016-2021	Distribution Main Condition Assessment	\$156,000		CityWide
	2016-2021	Distribution System Oversizing	\$168,000		CityWide
	2016-2021	Corrosion Control (aeration) Tower Condition Assessment & Upgrades	\$156,000		CityWide
	2016/2018/2020	On-site Generator Replacement Plan	\$237,000		CityWide
	2018-2021	Booster Station Upgrade/Rehabilitation	\$632,000		CityWide
	2019	Pressure Reducing Valve — East Bay Drive	\$260,000		NE
	2020	Fones Rd Water Main Construction	\$2,415,000		SE
Water Storage Systems	2017	Hoffman Court Reservoir Interior Coating Replacement	\$607,000		SE
	2017	Elliott Reservoir Seismic Retrofit	\$1,313,000		NW
	2017	Fir Street Reservoir #1 and #2 Seismic Retrofit	\$1,050,000		NE
	2018/2020	Storage Reservoir Coating (Interior/Exterior)	\$630,000		CityWide
Water Source Development & Protection	2016	Indian Summer Well Chlorination	\$158,000		SE
	2016	McAllister Wellfield Corrosion Control Treatment	\$2,277,000	\$1,023,000	COUNTY
	2016	Shana Park Source Contingency Plan	\$158,000		SE
	2016-2020	McAllister Wellfield Mitigation - Deschutes River	\$320,000	\$320,000	COUNTY
	2016-2020	McAllister Wellfield Mitigation - Woodland Creek	\$37,500	\$37,500	COUNTY
	2020	Olympia Brewery Water Engineering Analysis		\$53,000	SE
Water System Planning	2020	Update of Six-Year Water System Plan	\$157,500	\$157,500	CityWide

Program	Appropriation Year	Project Name	Anticipated Appropriation	Portion of Total Funded by GFC	Project Location
Asphalt Overlay Adjustment	2016-2021	Asphalt Overlay Adjustments	\$66,000		City Wide
Infrastructure Pre-Design & Planning	2016-2021	Pre-Design and Planning	\$234,000		City Wide
Lift Stations	2016	Old Port I Lift Station Upgrade	\$630,000		NW
	2017	Miller and Central Lift Station Upgrade		\$788,000	NE
	2017	Miller and Ann Generator	\$63,000		NE
	2018	Water Street Lift Station Force Mains Upgrade	\$472,500	\$472,500	DT
	2019	Old Port II Lift Station Upgrade		\$630,000	NW
	2020	Ken Lake Generator		\$63,000	NW
	2021	Roosevelt and Yew Lift Station Upgrade	\$630,000		NW
Onsite Sewage System	2017/2020	Neighborhood Sewer Program		\$1,050,000	City Wide
Conversions	2016-2021	Annual Sewer Extensions		\$948,000	City Wide
Sewer System Extensions	2016	Boulevard Sewer Extension at Morse Merryman Road Roundabout		\$788,000	SE
Sewer System Planning	2015-2020	Sewer System Televising and Condition Rating Program	\$132,000		City Wide
Replacements and Repairs	2016-2021	Allocation of Prioritized Repairs	\$1,390,000		City Wide
	2016-2021	Spot Repairs	\$630,000		City Wide
	2016	Percival Bridge Stabilization	\$200,000		NW
	2016-2017	SE Area Odor and Corrosion Control	\$300,000		SE
	2018	Manhole Repair and Replacement	\$105,000		City Wide

Program	Appropriation Year	Project Name	Anticipated Appropriation	Portion of Total Funded by GFC	Project Location
Aquatic Habitat Improvements	2016-2021	Land Acquisition/Stewardship/Enhancement	\$875,000		City Wide
Asphalt Overlay Adjustments		(Funding for this program is reflected within the Transportation section.)			
	2016-2021	Asphalt Overlay Adjustments	\$1,119,000		City Wide
Flood Mitigation & Collection	2016-2021	Condition Rating of Existing Conveyance	\$853,200		City Wide
	2016-2021	Conveyance Spot Repairs (Pipe Replacement)	\$474,000		City Wide
	2016-2021	Public Pond Rehabilitation ("City Owned Stormwater Pond Rehab")	\$260,000		City Wide
	2017/2019	Downtown Flood Mitigation	\$367,500		DT
	2016	North Percival Facility Modifications	\$288,300		NW
	2017	Cooper Point and Black Lake Conveyance	\$1,680,000	\$1,680,000	SW
	2018	Ascension and 4th Avenue Pond Construction	\$271,200		SW
	2019	Indian Creek Culverts at Plum Street	\$350,475	\$116,825	NE
	2019	Ken Lake Flood Conveyance	\$315,000	\$315,000	SW
	2020	Coleman, Bing and Walnut Conveyance	\$364,800	\$121,600	NW
	2020	Division and Scammel Conveyance	\$414,675	\$138,225	NW
Infrastructure Pre-Design & Planning	2016-2021	Pervious Pavement Contingency Fund	\$170,400		City Wide
Water Quality Improvements	2016	East Bay Water Quality Retrofit	\$761,300		NE
	2018	Harrison Avenue Water Quality Retrofit	\$523,500		NW
	2018	Capitol Way Water Quality Retrofit	\$472,900		DT
	2019	Evergreen Park Drive Treatment Facility	\$360,600		SW
	2021	Plum Street Water Quality Retrofit	\$800,000		DT