

**2016-2021**

# **CAPITAL IMPROVEMENT PROGRAM**



The Capital Improvement Program (CIP) is the implementation plan for identified software, City facilities, transportation, storm drainage, water, and wastewater projects. The capital infrastructure needs within the CIP are identified through a variety of sources, including Master Plans. Other sources used to identify capital projects are: City Council goals, operational needs, and regulatory obligations.

In keeping with the Department's Vision Statement, Staff has begun a program to reduce the amount of inflow and infiltration (I&I) that enters the wastewater system. I&I is the term used to describe surface and subsurface water that enters the wastewater piping system, caused primarily by aging infrastructure that needs to be repaired or replaced. The water enters into the wastewater pipes through cracks, holes, joint failures, faulty connections, and through holes in manhole covers. During large storm events I&I can create an overflow situation as the system is not built to handle the additional water. Although I&I is essentially 'clean water', the additional water flows to the wastewater treatment plant and must be treated with the normal wastewater flows. Normal dry weather processing at the wastewater treatment plant is approximately 3 million gallons per day, whereas, during heavy rainfall events the peak flows at the wastewater treatment plant are in excess of 20 million gallons per day. This additional flow due to excessive I&I create added operational and maintenance costs to the wastewater system.

Projects based on the adopted plan will be proposed for the next 5 fiscal years to aggressively repair and/or replace inadequate portions of the system. Although the costs to repair the aging wastewater collection system will be significant, it can no longer be postponed. Two projects were completed last fiscal year and there has been a noticeable reduction in I & I in those basins already.

Engineering Services is also committed to providing well maintained streets to our citizens. Although, this work started in 2012, there is a substantial amount of road repair yet to be completed. The road maintenance program budget continues to be underfunded, as identified in the 2014 City wide Pavement Management System Implementation Report. Staff has embarked on a project to determine and implement new funding sources. Phase 1 of this project is expected to be complete within the year.

Oregon Department of Transportation (ODOT) remains committed to constructing the Newberg/Dundee Bypass. Since this state highway system runs through Newberg, the City is required to pay a share of the cost of the bypass. ODOT has agreed to loan the money to the City with interest only payments begun in 2014. Full payments begin in 2018. These payments will be made using the Federal Funds Exchange.

Since 2007, there has been a major effort to upgrade the City's Wastewater Treatment Plant. A new expanded influent pump station, headworks, screw press dewatering equipment, secondary clarifier, and a septage receiving station has been added and upgraded. The City will continue the upgrade with the addition of a hypochlorite

generation, roofing repairs and structural repairs to the existing oxidation ditches in 2016-17. The next major upgrades will be determined after an update to the Master Plan is completed in 2017.

The City continues to focus its efforts towards establishing a high quality and adequate potable water supply, storage, and distribution system. A new well was just completed and improvements to two existing reservoirs are underway. With the completion of the Master Plan in the fall of 2016, additional projects will be added to the CIP.

Engineering Services works closely with Public Works Operations and Maintenance to complete the identified projects on an annual basis. The fiscal year 2015-2016 Capital Improvement Program implements the planning, design, and construction of the capital infrastructure needs of the City by prioritizing projects based on an analysis of the master plans and other studies in combination with the availability of funding. The scheduled projects in the years beyond FY 2015-16 are not intended to be a spending commitment, but are included to show a proposed plan for the projects that are considered to be a priority at this particular snapshot in time.

The Capital Improvement Projects for FY 2016-17 are shown on the following page.

# Capital Improvement Projects 2015-2016

## Current Projects

## Budget

## Proj. No.

Transportation

Sidewalk, ADA, & Bikeway Improvements - Citywide	\$30,000	TR-001
Villa Road Improvements *	\$1,200,000	TR-002
Pavement Maintenance - Citywide	\$60,000	TR-005
Pavement Rehabilitation - Citywide	\$200,000	TR-006

Water

Water Master Plan - Citywide	\$300,000	WA-002
Reservoir Improvements, Design & Construction	\$2,500,000	WA-004

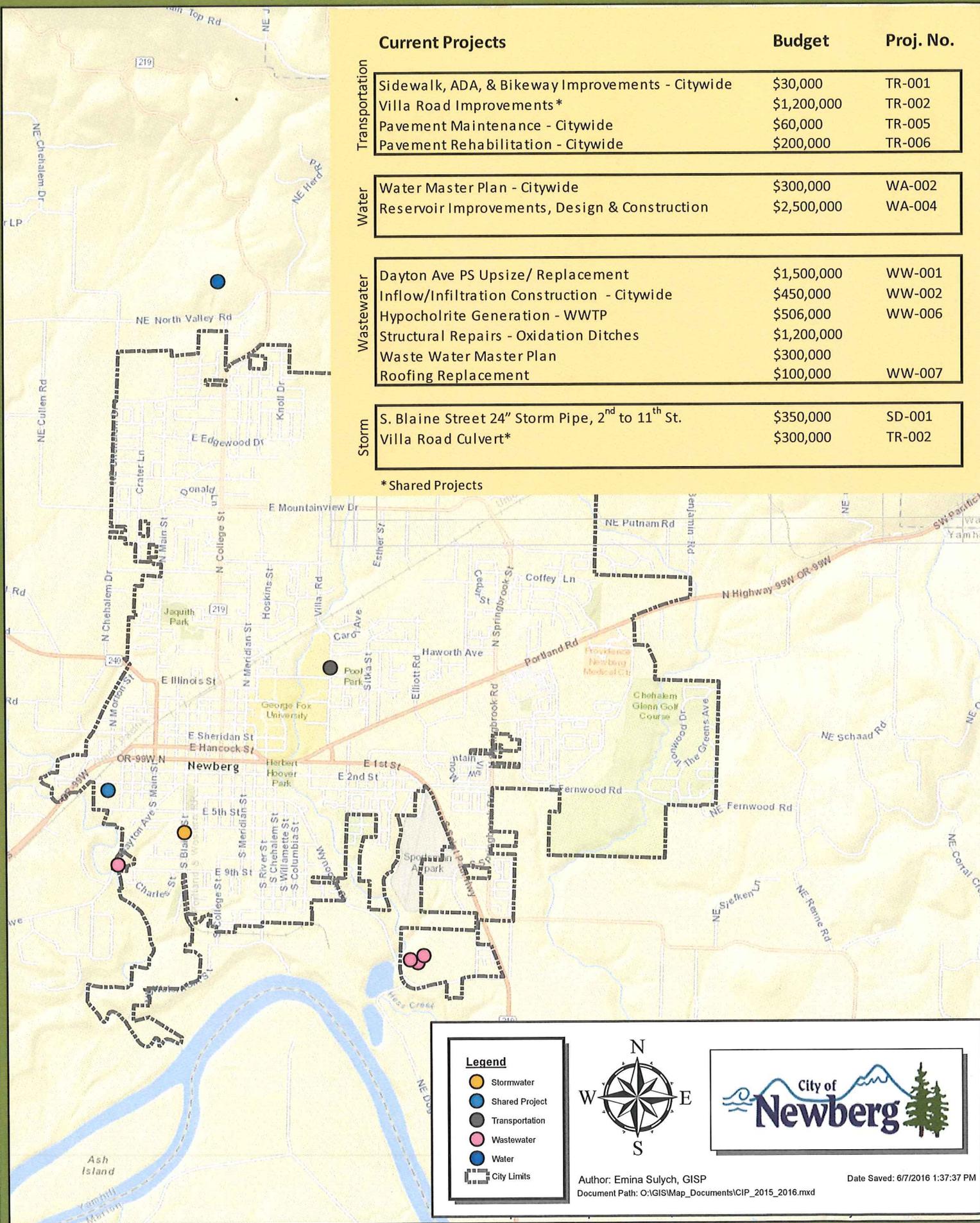
Wastewater

Dayton Ave PS Upsize/ Replacement	\$1,500,000	WW-001
Inflow/Infiltration Construction - Citywide	\$450,000	WW-002
Hypochlorite Generation - WWTP	\$506,000	WW-006
Structural Repairs - Oxidation Ditches	\$1,200,000	
Waste Water Master Plan	\$300,000	
Roofing Replacement	\$100,000	WW-007

Storm

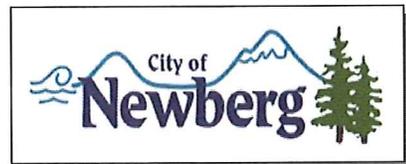
S. Blaine Street 24" Storm Pipe, 2 <sup>nd</sup> to 11 <sup>th</sup> St.	\$350,000	SD-001
Villa Road Culvert*	\$300,000	TR-002

\* Shared Projects



### Legend

- Stormwater
- Shared Project
- Transportation
- Wastewater
- Water
- City Limits



Author: Emina Sulych, GISP

Document Path: C:\GIS\Map\_Documents\CIP\_2015\_2016.mxd

Date Saved: 6/7/2016 1:37:37 PM

# MULTI-FUNDED PROJECTS

The following project summary sheets were developed from a variety of sources. The projects affect all of the enterprise funds and include things like improvements to City facilities and major software purchases.

# Facilities Program Project Summary Sheet

Sungard/TrakIT Permitting Software

**Criteria Met:**

Fiscal Year	Costs
2016/2017	\$330,000
<b>Project Total</b>	<b>\$330,000</b>

	Safety/Liability
x	Council Goals
	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

**Project Description:**

The implementation of this permitting software will improve transparency, enhance interdepartmental communication and will utilize our existing Geographical Information System. This addresses several of the Council Strategic Priorities specifically technology and improving our communication between our citizens and allowing for expanded ability to do business electronically.

**Proposed Funding Sources:**

This project is funded by the Utility, SDC and General Funds.



# Facilities Program Project Summary Sheet

## Maintenance Facility

### Criteria Met:

Fiscal Year	Costs
2017/2018	\$400,000
2018/2019	\$750,000
2020/2021	\$1,000,000
2021/2022	\$1,000,000
<b>Project Total</b>	<b>\$3,150,000</b>

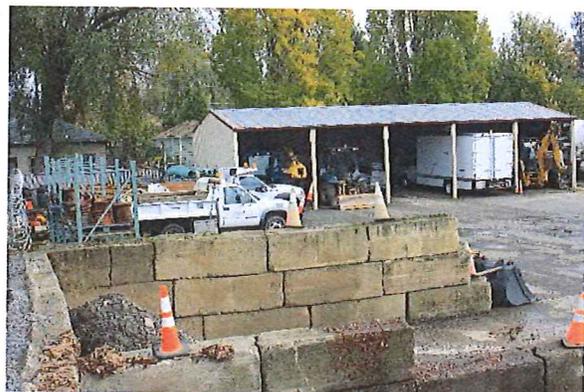
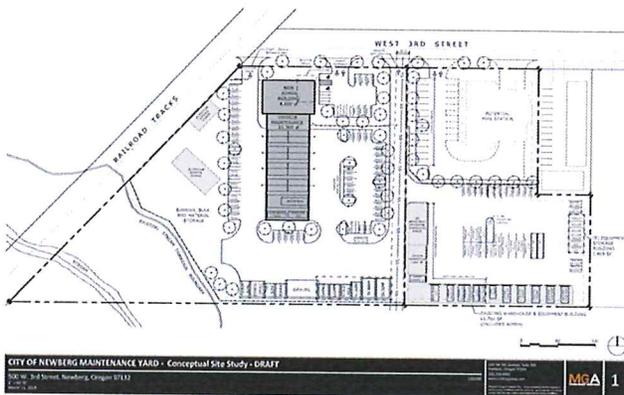
x	Safety/Liability
x	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

A master plan has been completed on what the newly expanded maintenance yard could look like. In the past fiscal year, some frontage improvements have been constructed. Next year there will be a remodel of the existing office building. The rest of the improvements include major site work, construction of a new fleet building and eventually a new administration building.

### Proposed Funding Sources:

The project is to be funded by utility funds, and system development charges.



# Facilities Program Project Summary Sheet

Cartegraph Software

## Criteria Met:

Fiscal Year	Costs
2016/2017	\$300,000
<b>Project Total</b>	<b>\$300,000</b>

x	Safety/Liability
x	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

## Project Description:

The current city's Computerized Maintenance Management System is Cartegraph Navigator. This system has been in use since 2004, and is the asset database and maintenance management system used that contains the city's infrastructure work requests, work orders, and other maintenance history of each identified component of the city street, water, wastewater, storm and fleet systems.

Navigator has become obsolete, and is being replaced by OMS (Operational Maintenance System), which supports newer technology, including field based terminals (iPads). Navigator is entering a maintenance only mode, with no future enhancements or upgrades. Without upgrading to OMS, or another current similar system, with historical data transfer, we will not be able to support enhanced field terminals, continue to have to rely on handwritten reports and manual data input, and the potential loss of system maintenance history as the system becomes incompatible with technology upgrades to hardware and software, or as the unsupported Cartegraph Navigator software corrupts or fails.

## Proposed Funding Sources:

The project is to be funded by utility funds, and system development charges.

# Facilities Program Project Summary Sheet

Wonderware Software

## Criteria Met:

Fiscal Year	Costs
2017/2018	\$100,000
<b>Project Total</b>	<b>\$100,000</b>

x	Safety/Liability
x	Council Goals
	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

## Project Description:

Wonderware is the Operator Interface System (OIS) at the Water and Wastewater plants that allows communications between the operators, the PLC's and the individual inputs and outputs out in the field. An input or output could be anything from a valve that has to be open or closed to a flow meter whose readings need to be registered and compiled. An input/output could be a pump that needs to start or stop, a reservoir level or an alarm that would call and operator. Wonderware has been in use as our OIS since 1997. The version of Wonderware we are currently using is a generation that uses the Windows 7 operating system. The windows 7 operating system will eventually become unsupported so the current version of Wonderware will become obsolete and it will be necessary to purchase a new OIS. Whether that OIS is an updated version of Wonderware or another OIS is yet to be determined.

## Proposed Funding Sources:

The project is to be funded by utility funds, and system development charges.



# TRANSPORTATION PROJECTS

The Transportation Program provides planning, engineering, and construction for improvements to the City's transportation systems that safely preserve existing infrastructure, increase roadway capacity, improve mobility and/or enhance neighborhood livability.

The primary funding source for the roadway maintenance budget is the City's share of the state gas tax revenue. This revenue source has been in decline since 2005-06 due to the public's response to increased fuel prices, higher mile per gallon vehicles, and only moderate economic growth. A secondary funding source for roadway improvements is federal funding distributed by ODOT through the Surface Transportation Program (STP), and can only be used for new roadway construction or full reconstruction of existing roadways, not maintenance projects.

The following project summary sheets were developed from the Transportation System Master Plan and associated studies while considering the available funds from state gas tax revenue, surface transportation program (federal funds exchange) and system development charges.

# Transportation Program Project Summary Sheet

## ADA/Bicycle/Pedestrian Improvements

### Criteria Met:

Fiscal Year	Costs
2015/2016	\$30,000
2016/2017	\$30,000
<b>Project Total</b>	--

x	Safety/Liability
x	Council Goals
	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

City Council established a comprehensive bicycle program in 2011 to implement the policies and recommended improvements in the ADA/Pedestrian/Bike Route Improvement Plan.

Projects are selected based on the City's need and available funding for each fiscal year. The ADA/Pedestrian/Bike Route Improvement Plan is a resource the City often utilizes in selecting improvement projects. Current utility maintenance projects include replacement or installation of ADA accessible barriers identified in the plan. The ADA/Pedestrian/Bike Route Improvement Plan can be found on the city website.

### Proposed Funding Sources:

This project is funding by the gas taxes that the City receives from the State of Oregon. A portion (1%) of the gas tax the City receives must be spent on bicycle projects in the right-of-way. The funding is split in the budget between the Street Capital Fund and the Street Maintenance Fund.



# Transportation Program Project Summary Sheet

## Villa Road Improvements

### Criteria Met:

Fiscal Year	Costs
2015/2016	\$320,000
2016/2017	\$1,200,000
2017/2018	~\$1,400,000
<b>Project Total</b>	<b>\$2,920,000</b>

x	Safety/Liability
x	Council Goals
	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

### Project Description:

Villa Road north of 99W is a two lane major collector roadway that has intermittent sections of curb and sidewalk improvements. The proposed roadway improvement project is to construct a full width street improvement project consisting of curbs, sidewalk, and bike lanes, from Fulton Street to Crestview Drive.

The 2007 ADA/Pedestrian/Bike Route Improvement Plan identified the project as a primary critical pedestrian and bikeway route. The incomplete sidewalk connections are unsafe as it forces pedestrians onto the roadway shoulders.

This project also coordinates with a stormwater project of the same name.

### Proposed Funding Sources:

The project is to be funded by stormwater funds, gas tax revenue, system development charges and the Federal Funds Exchange.



# Transportation Program Project Summary Sheet

## Pavement Maintenance

### Criteria Met:

Fiscal Year	Costs
2015/2016	\$225,000
2016/2017	\$200,000
<b>Project Total</b>	--

x	Safety/Liability
x	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
	Future Capacity

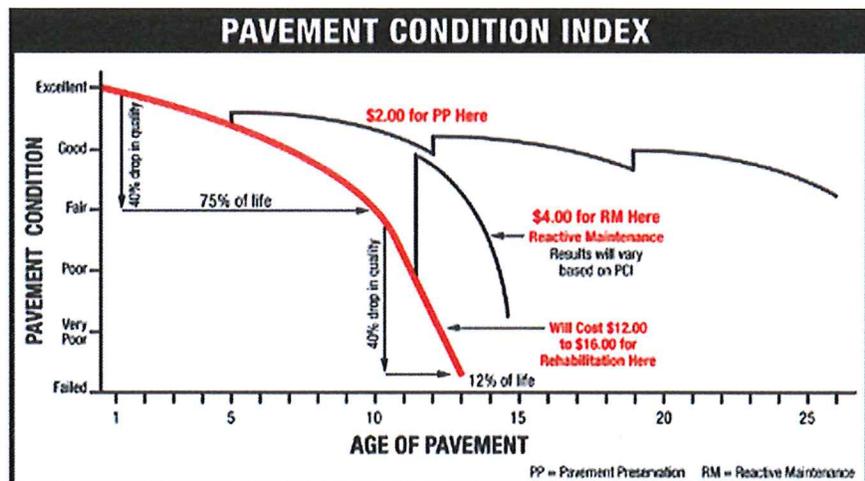
### Project Description:

Yearly maintenance of the pavement surfaces in the City is needed to minimize water intrusion and damage to the pavement structure. Studies have shown that it is much more cost effective to regularly seal the pavement surface every 5-7 years, than it is to overlay or grind/inlay the pavement every 15-20 years.

The proposed roadway maintenance measures are mainly targeted to the roadways in good/fair/poor condition in the City to preserve the surface from water intrusion and premature pavement failure.

### Proposed Funding Sources:

This project is funding by the gas taxes that the City receives from the State of Oregon. The funding is split in the budget between the Street Capital Fund and the Street Maintenance Fund.



# Transportation Program Project Summary Sheet

College Street Bikelanes and Sidewalk

**Criteria Met:**

Fiscal Year	Costs
2017/2018	\$250,000
<b>Project Total</b>	<b>\$250,000</b>

x	Safety/Liability
x	Council Goals
	Maintenance
	Required per Regulation
x	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

**Project Description:**

The 2007 ADA/Pedestrian/Bike Route Improvement Plan identified the project as a primary critical pedestrian and bikeway route. The incomplete sidewalk connections are unsafe as it forces pedestrians onto the roadway shoulders.

**Proposed Funding Sources:**

This project will be funded by the STP and gas tax revenues.



# Transportation Program Project Summary Sheet

Elliot Road; 99W to Newberg High School

**Criteria Met:**

Fiscal Year	Costs
2018/2019	\$350,000
2019/2020	\$750,000
2020/2021	\$750,000
<b>Project Total</b>	<b>\$1,850,000</b>

x	Safety/Liability
x	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

**Project Description:**

The TSP has identified this project as a high priority as it provides direct access to the high school. This project will construct full street improvements to include sidewalks and bike lanes. It will also include storm drainage improvements.

**Proposed Funding Sources:**

This project will be funded by gas tax revenues and system development charges.



# Transportation Program Project Summary Sheet

Crestview Drive; 99W to Springbrook Road

**Criteria Met:**

Fiscal Year	Costs
2017/2018	\$1,100,000
<b>Project Total</b>	<b>\$1,100,000</b>

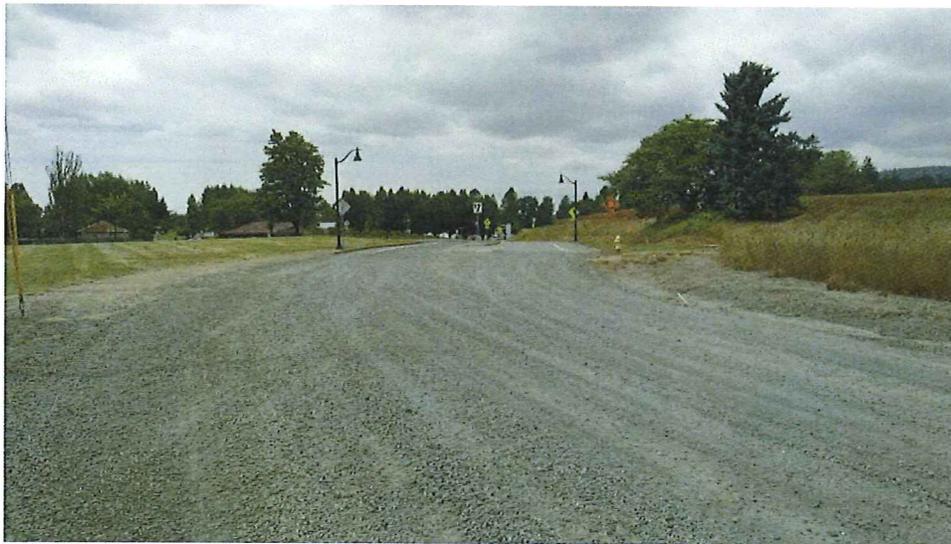
	Safety/Liability
x	Council Goals
	Maintenance
	Required per Regulation
x	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

**Project Description:**

Crestview Drive is an important transportation link to the north portion of the City. It will connect 99W at Providence Drive to N. Springbrook Road. The two sections on either end of the alignment have not been constructed. This improvement will include curbs, gutters, bike lanes and sidewalks.

**Proposed Funding Sources:**

The overall project is projected to cost \$5,000,000. The Transportation SDC will contribute \$1,100,000, the state will contribute \$740,000 and the balance will be funded by Springbrook Properties and Gramor Development.



# Transportation Program Project Summary Sheet

N. Springbrook Road; 99W to Crestview

**Criteria Met:**

Fiscal Year	Costs
2015/2016	\$30,000
2016/2017	\$30,000
<b>Project Total</b>	--

x	Safety/Liability
x	Council Goals
	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

**Project Description:**

This project will complete bike lanes and sidewalks along N. Springbrook Road. It will also be constructed in conjunction with storm drainage, waterline and wastewater line improvements.

**Proposed Funding Sources:**

This project is funded by the gas taxes that the City receives from the State of Oregon and Transportation SDCs paid by developers. A portion (1%) of the gas tax the City receives must be spent on bicycle projects in the right-of-way.



# Transportation Program Project Summary Sheet

## LED Street Light Conversion

### Criteria Met:

Fiscal Year	Costs
2016/2017	\$200,000
<b>Project Total</b>	--

x	Safety/Liability
x	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

This project will start the conversion of our existing street lights to an LED light. This will transition all of the City owned street lights from being maintained by PGE to being maintained by the City.

### Proposed Funding Sources:

This project is funded by the gas taxes that the City receives from the State of Oregon.





# STORMWATER PROJECTS

The Stormwater Program provides planning, design and construction of improvements for the City's public storm drainage system. This program includes the surface water conveyance and water quality systems.

The 2014 Drainage Master Plan Update is used to plan for improvements to the overall City storm drainage system. Funding for the stormwater program is provided through stormwater utility rates and system development charges.

# Stormwater Program Project Summary Sheet

S. Blaine Street; Hancock – 11<sup>th</sup> Street

### Criteria Met:

Fiscal Year	Costs
2015/2016	\$450,000
2016/2017	\$350,000
2017/2018	\$300,000
2018/2019	\$300,000
<b>Project Total</b>	<b>\$1,350,000</b>

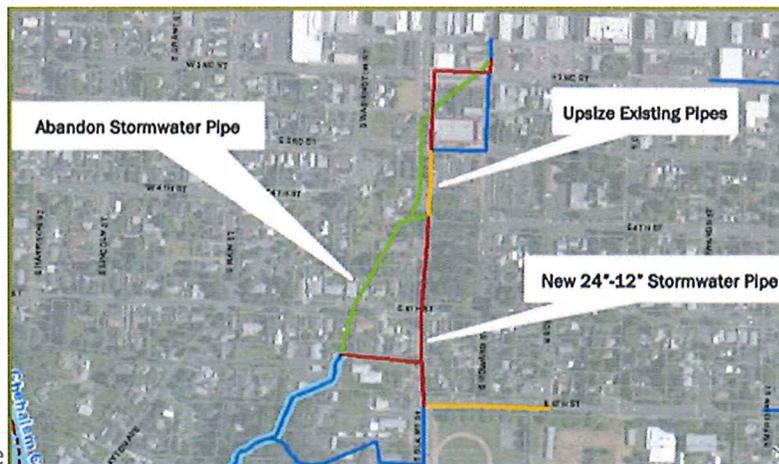
x	Safety/Liability
	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

Flooding occurs in the 10 year storm event including Second Street, Howard Street and at 6th Street and Blaine Street. Large segments of the existing pipe are constructed of corrugated metal and are near end of life. The project will decommission the existing stormwater pipes (shown in green below) and construct a new 24" stormwater mainline (shown in red) along South Blaine and 2nd Streets. Sections of the existing piping system will also be upsized to convey existing and future flows (shown in gold). This project will also include the storm system adjacent to 99W and the Second Street Parking Lot.

Due to funding constraints, the project is scheduled to be constructed in phases over several fiscal years. The 1<sup>st</sup> phase of construction will begin in FY15-16.

**Proposed Funding Sources:** This project is funded by the stormwater utility fee and a small amount of projects in the right-of-way.



# Stormwater Program Project Summary Sheet

Villa Road Improvements at Hess Creek

## Criteria Met:

Fiscal Year	Costs
2015/2016	\$120,000
2016/2017	\$300,000
<b>Project Total</b>	<b>\$420,000</b>

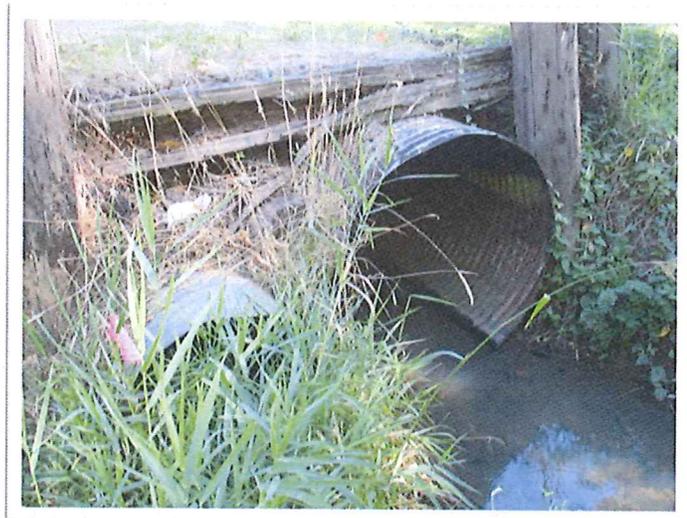
x	Safety/Liability
	Council Goals
	Maintenance
x	Required per Regulation
x	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
x	Future Capacity

## Project Description:

See the Villa Road Improvement project description in the Transportation section. This reconstruction of the two culverts under Villa Road will both be required to meet fish passage requirements per State permits.

## Proposed Funding Sources:

This project is funded through the stormwater utility and stormwater SDCs.



# Stormwater Program Project Summary Sheet

S. Center Street; 3<sup>rd</sup> Street to 9<sup>th</sup> Street

## Criteria Met:

Fiscal Year	Costs
2018/2019	\$180,000
2019/2020	\$300,00
2020/2021	\$930,000
<b>Project Total</b>	<b>\$1,410,000</b>

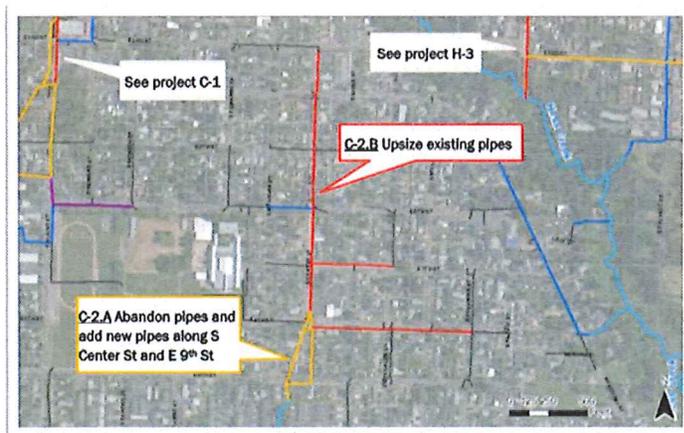
x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
	Future Capacity

## Project Description:

There are sections of the existing 21" storm drainage system that crosses underneath multiple structures. In the 10 year storm event, 7<sup>th</sup>, 8<sup>th</sup> and Center Streets flood. This project will upsize existing pipes and will realign portions of the pipe out into the public right-of-way.

## Proposed Funding Sources:

This project is funded through the stormwater utility.



# Stormwater Program Project Summary Sheet

N. Springbrook Road; 99W to Crestview

### Criteria Met:

Fiscal Year	Costs
2021/2022	\$150,000
2022/2023	\$800,000
<b>Project Total</b>	<b>\$950,000</b>

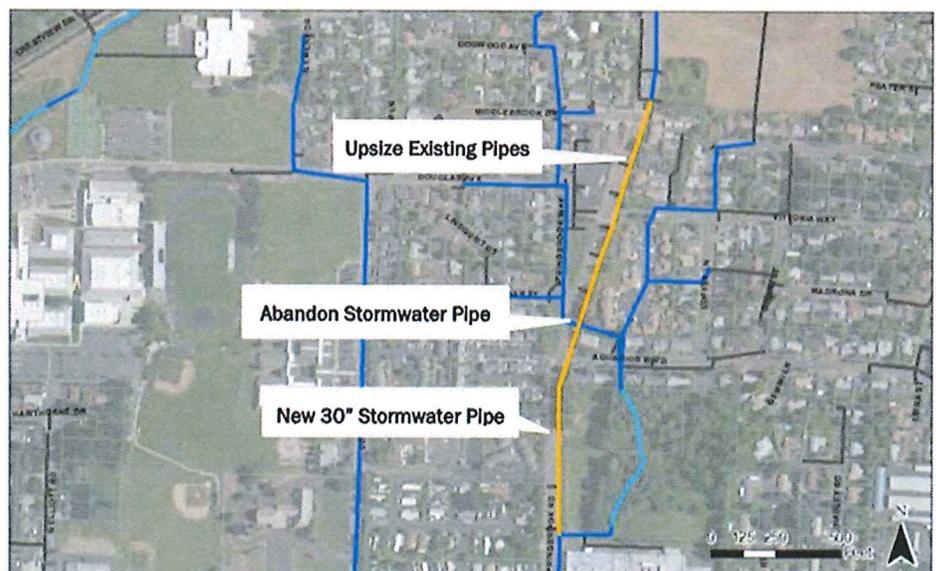
x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
x	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

### Project Description:

There are existing flooding problems along Springbrook Road. This project will upsize all of the pipe to be 30" in diameter and will be constructed with the larger roadway project. See the N. Springbrook Road Improvement project description in Transportation for more information about that work.

### Proposed Funding Sources:

This project is funded through the stormwater utility and stormwater SDCs. Approximately 10% of this project is attributed to growth.



# Stormwater Program Project Summary Sheet

E. Columbia Drive

## Criteria Met:

Fiscal Year	Costs
2021/2022	\$100,000
<b>Project Total</b>	--

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

## Project Description:

The storm drainage system in E. Columbia Drive is constrained by three 18" pipes. Most of the system in this area is 24" pipe. Overflow from manholes can be expected from a 10 year storm event in this location. This project will replace those sections of pipe with 24" pipe.

## Proposed Funding Sources:

This project is funded through the stormwater utility and SDCs. This project is 15% growth related.



# Stormwater Program Project Summary Sheet

N. Elliot

## Criteria Met:

Fiscal Year	Costs
2019/2020	\$250,000
<b>Project Total</b>	<b>\$250,000</b>

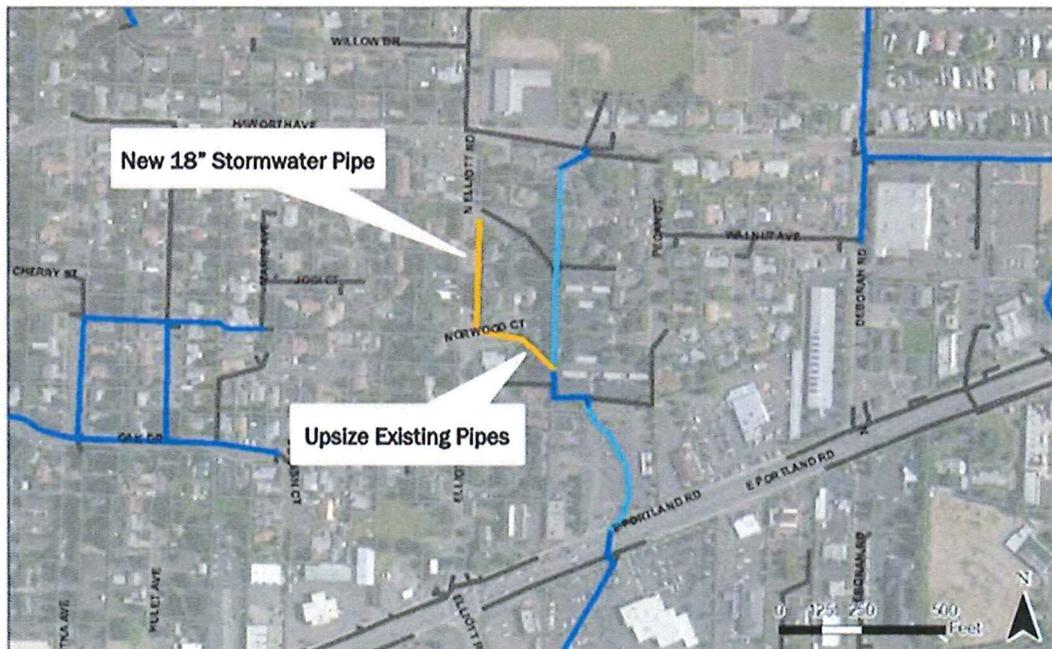
x	Safety/Liability
	Council Goals
	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
x	Future Capacity

## Project Description:

There is no public storm drainage system in N. Elliot Road resulting in frequent ponding. This project would add 18" storm pipe to the system as a part of the larger roadway project. See the N. Elliot Road Improvement project description in Transportation for more information.

## Proposed Funding Sources:

This project is funded through the stormwater utility and SDCs. This project is 5% attributable to future growth.



# Stormwater Program Project Summary Sheet

TMDL Implementation Plan/Water Quality Improvements

### Criteria Met:

Fiscal Year	Costs
2017/2018	\$50,000
2018/2019	\$50,000
2019/2020	\$50,000
<b>Project Total</b>	—

x	Safety/Liability
	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

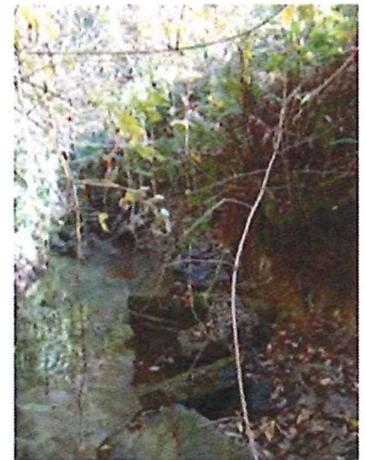
The City currently has an approved Total Maximum Daily Load (TMDL) Implementation Plan. Although a great portion of the plan has been implemented due to staffing and budgetary shortfalls, it is mostly a reactive program. These dollars will help move towards a more proactive program. Those elements might include additional GIS mapping efforts, maintenance activities, storm facility inspection and retrofit and possibly an education/enforcement program for private facilities.

### Proposed Funding Sources:

This project is funded through the stormwater utility.



Hess Creek (DS of Mountainview Drive)  
Residential Stormwater Outfall



West Bank Chehalem Creek  
Streambank Erosion

# WASTEWATER PROJECTS

The Wastewater Program provides planning, design and construction of improvements for the City's public wastewater utility system. This program area includes the pump stations, wastewater treatment plant, and wastewater collection and conveyance system. The majority of the wastewater budget is allocated to the needed improvements at the wastewater treatment plant.

The following project list was developed from the Sewerage Master Plan, the 2007 Wastewater Treatment Facilities Plan Update and other associated studies, while considering the available funds from the wastewater utility rates and system development charges.

# Wastewater Program Project Summary Sheet

## Inflow and Infiltration Projects

**Criteria Met:**

Fiscal Year	Costs
2016/2017	\$450,000
2017/2018	\$450,000
2018/2019	\$450,000
2019/2020	\$600,000
2020/2021	\$600,000
<b>Project Total</b>	--

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

**Project Description:**

The 2015 Inflow and Infiltration Report identified the need for significant replacements/rehabilitation of the older sections of the wastewater collections system throughout the City. The goal of the project is to replace the aging pipe infrastructure to reduce the maintenance costs and the stormwater inflow and infiltration into the system based on the priorities listed in the report.

**Proposed Funding Sources:**

This project is funded through the wastewater utility and SDCs. This project is 50% growth related.



# Wastewater Program Project Summary Sheet

## Dayton Avenue Pump Station

### Criteria Met:

Fiscal Year	Costs
2015/2016	\$300,000
2016/2017	\$1,500,000
2017/2018	\$2,500,000
<b>Project Total</b>	<b>\$4,300,000</b>

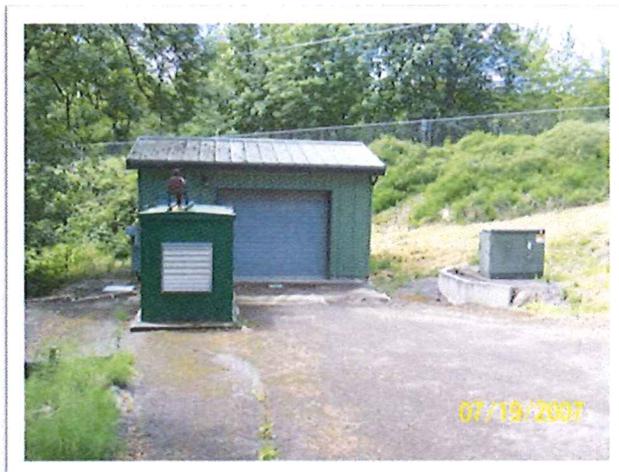
x	Safety/Liability
	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

### Project Description:

The existing Dayton Avenue pump station and the 4,000 foot long 12-inch force main were constructed in 1993. The Gorman-Rupp top-side dry pumps are nearing the end of their service life and the volume of the station wet well is significantly undersized for the flows to the station. The station overflows into Chehalem Creek during very high flow events. The City hired RH2 Engineering to complete a feasibility analysis and preliminary design. This project will begin implementing these recommendations.

### Proposed Funding Sources:

This project is funded through the wastewater utility.



# Wastewater Program Project Summary Sheet

Compost Facility

**Criteria Met:**

Fiscal Year	Costs
2016/2017	\$50,000
2017/2018	\$55,000
2022/2023	\$50,000
<b>Project Total</b>	--

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

**Project Description:**

Historically the conveyor chain in the compost facility has needed to be replaced every 4-5 years due to wear and stretching. The last replacements were done in 2011, and at that time Staff changed the flights from steel to UHMW which seems to be increasing the lifespan as the chain is still in decent shape. Without having a better history with this new setup, Staff erred on the side of caution and has included the replacement twice assuming a 4 year lifespan.

**Proposed Funding Sources:**

This project is funded through the wastewater utility.



# Wastewater Program Project Summary Sheet

## Roofing Replacement at WWTP

### Criteria Met:

Fiscal Year	Costs
2016/2017	\$100,000
2018/2019	\$150,000
2022/2023	\$70,000
<b>Project Total</b>	<b>\$350,000</b>

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

The maintenance of roofs on the existing buildings at the treatment plant has been deferred. The buildings include: Composter Building, Tunnels Building, Gutters and Soffits, Screw Press Room, Disinfection Building; Administration Building and the Secondary Building.

### Proposed Funding Sources:

This project is funded through the wastewater utility.



# Wastewater Program Project Summary Sheet

## Coating on Pump Stations

### Criteria Met:

Fiscal Year	Costs
2017/2018	\$100,000
2020/2021	\$100,000
<b>Project Total</b>	<b>\$200,000</b>

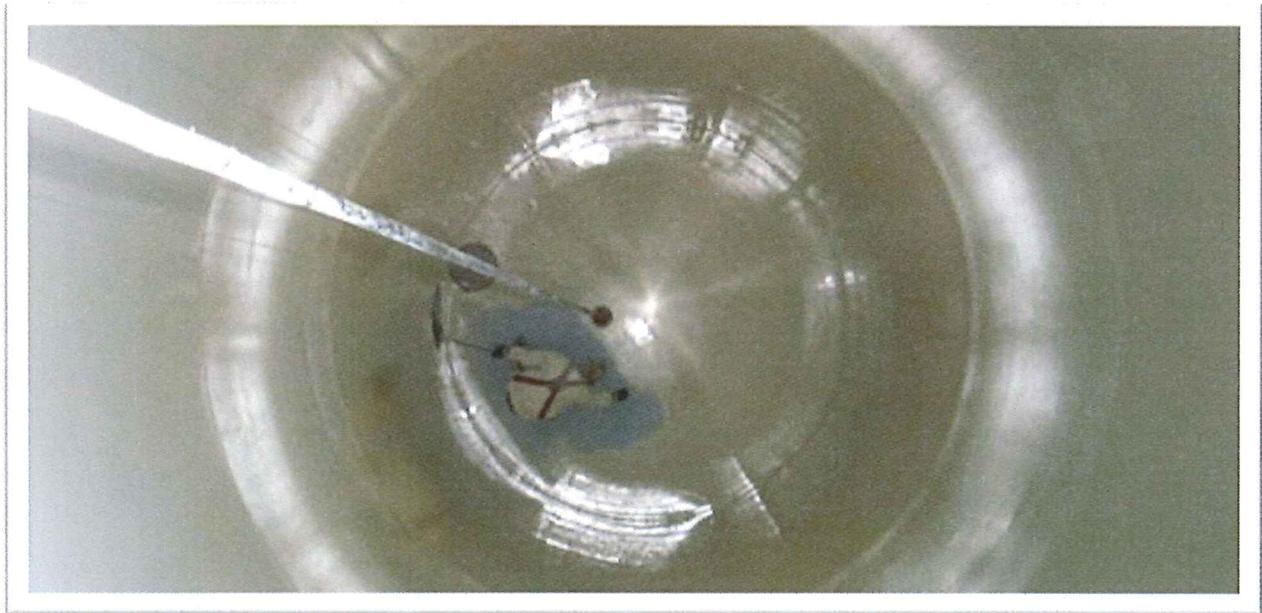
	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

As pump stations age, the interiors can degrade due to the corrosive properties of wastewater. Coating the interiors can extend the life and reduce maintenance of the stations. This project is to coat the Fernwood Road and Creekside pump stations.

### Proposed Funding Sources:

This project is funded through the wastewater utility.



# Wastewater Program Project Summary Sheet

## Wastewater Master Plan

### Criteria Met:

Fiscal Year	Costs
2016/2017	\$300,000
<b>Project Total</b>	<b>\$300,000</b>

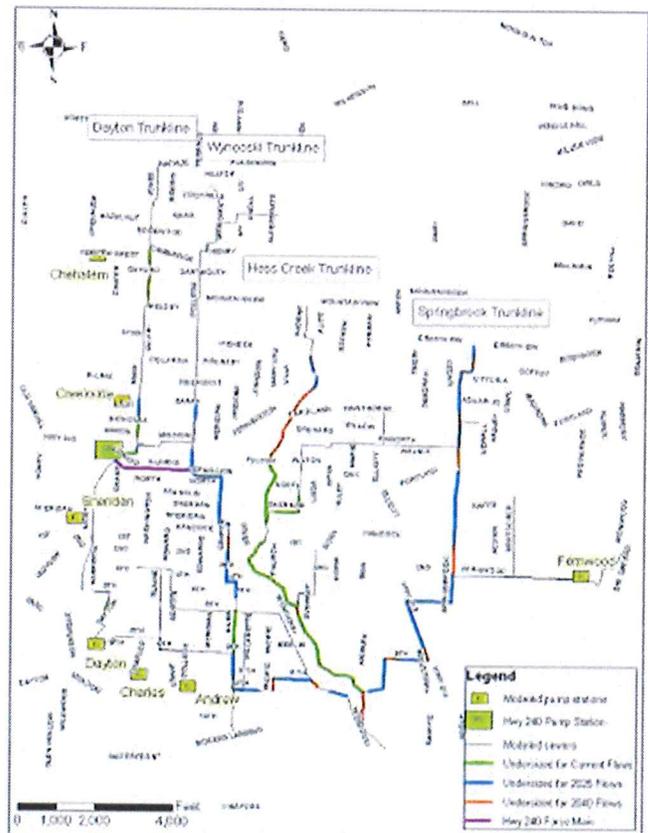
	Safety/Liability
	Council Goals
	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

The last Wastewater Master Plan was completed in 2007. Per ORS they are required to be updated every 10 years. This update will include modeling the capacity of the system, including the treatment plant, and identify projects to address system deficiencies.

### Proposed Funding Sources:

This project is funded through the wastewater utility.



# Wastewater Program Project Summary Sheet

## Existing Oxidation Ditches

### Criteria Met:

Fiscal Year	Costs
2016/2017	\$1,200,000
2019/2020	\$1,000,000
<b>Project Total</b>	<b>\$2,200,000</b>

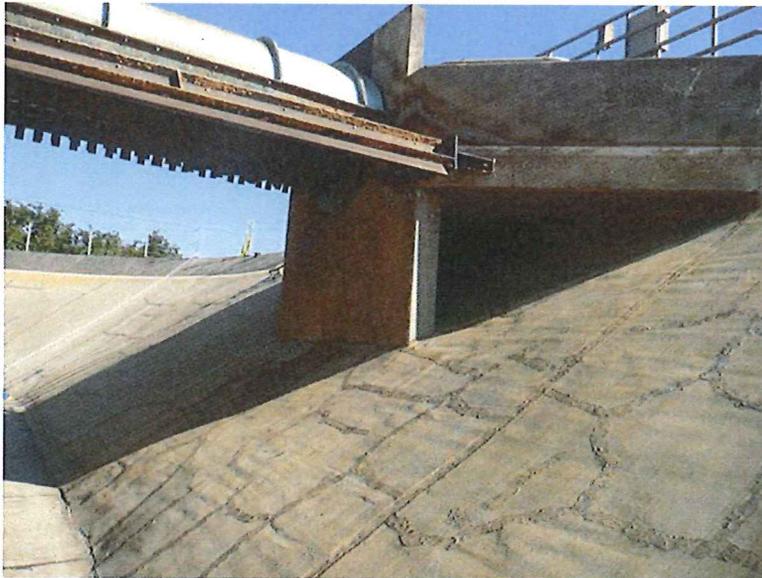
x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

### Project Description:

The construction of new oxidation ditches is proposed to start in FY20/21. In order to maximize our existing ditches they need to be structurally rehabilitated. Only one ditch can be offline at any one time, therefore, they are shown to be completed over several years.

### Proposed Funding Sources:

This project is funded through the wastewater utility and SDCs. This project is 10% growth related.



# Wastewater Program Project Summary Sheet

## Inflow and Infiltration Report

### Criteria Met:

Fiscal Year	Costs
2019/2020	\$200,000
<b>Project Total</b>	<b>\$200,000</b>

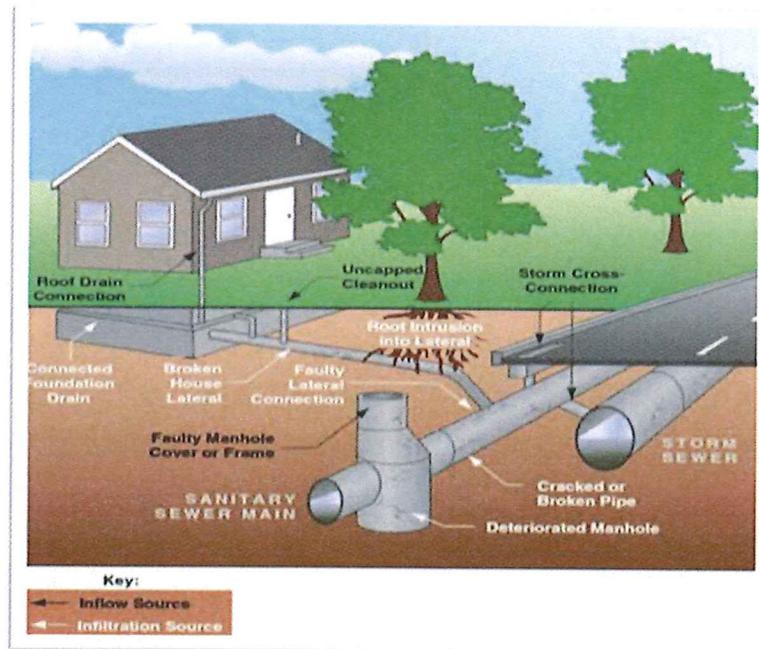
	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

### Project Description:

The 2015 report focused on the Dayton and Wyooski Basins. This report will evaluate the Hess and Springbrook Basins and update the information for completed inflow and infiltration projects.

### Proposed Funding Sources:

This project is funded through the wastewater utility and SDCs. This project is 50% growth related.







# Wastewater Program Project Summary Sheet

N. Springbrook Road Trunk Line

## Criteria Met:

Fiscal Year	Costs
2016/2017	\$509,000
<b>Project Total</b>	<b>\$--</b>

x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

## Project Description:

The Wastewater Treatment Plant currently uses chlorine gas to disinfect the effluent. Chlorine gas facilities are a safety concern. In order to alleviate this concern, a hypochlorite generator will be installed. This project started this fiscal year and will continue into the next fiscal year.

## Proposed Funding Sources:

This project is funded through the wastewater utility.



# Water Projects

The Water Program provides planning, design and construction of improvements for the City's public water utility system. This program area includes the well field, storage reservoirs, water treatment plant, and water distribution system.

The following project list was developed from the Water Master Plan and other associated studies while considering the available funds from the water utility rates and system development charges.

# Water Program Project Summary Sheet

## Water Master Plan

### Criteria Met:

Fiscal Year	Costs
2015/2016	280,000
2016/2017	\$20,000
<b>Project Total</b>	<b>\$300,000</b>

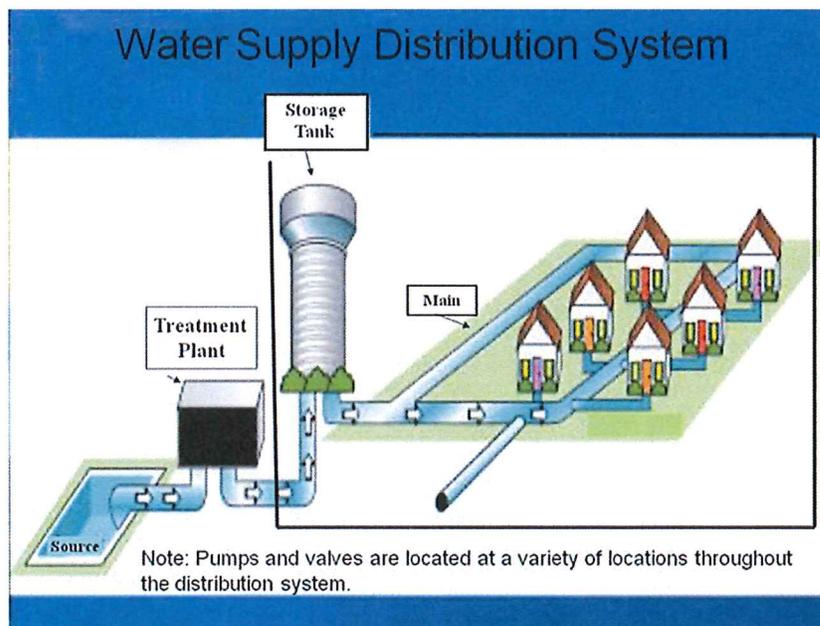
	Safety/Liability
x	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

### Project Description:

The last Water Master Plan was adopted in 2004. Master Plans are generally updated every 10 years. The master plan will look at everything from source to distribution. This process is underway and will be completed in Summer/Fall of 2016. This plan will lay out the capital needs and revenues over the next 20 years.

### Proposed Funding Sources:

This project is funded through the water utility. This project is 25% growth related.



# Water Program Project Summary Sheet

## North Valley Reservoirs

**Criteria Met:**

Fiscal Year	Costs
2015/2016	\$1,700,000
2016/2017	\$925,000
<b>Project Total</b>	<b>\$2,625,000</b>

x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
	Future Capacity

**Project Description:**

There are two existing 4 mg concrete reservoirs on this site. They were constructed in 1960 and 1977. Little to no structural maintenance has been completed on these reservoirs. In order to provide some surety in the event of an earthquake, NV#2 will be seismically retrofitted. Both reservoirs will be given an interior coating and a water mixing system. NV#2 is currently underway and NV#1 will occur next fall.

**Proposed Funding Sources:**

This project is funded through the water utility. This project is 15% growth related.



# Water Program Project Summary Sheet

## Hypochlorite Generator

### Criteria Met:

Fiscal Year	Costs
2018/2019	\$500,000
<b>Project Total</b>	<b>\$500,000</b>

x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

The existing generator at the Water Treatment Plant is nearing end of life. This project would replace the existing generator and would be compatible with the system that will be installed at the Wastewater Treatment Plant.

### Proposed Funding Sources:

This project is funded through the water utility.



# Water Program Project Summary Sheet

## Valves on College Street

### Criteria Met:

Fiscal Year	Costs
2018/2019	\$200,000
<b>Project Total</b>	<b>\$200,000</b>

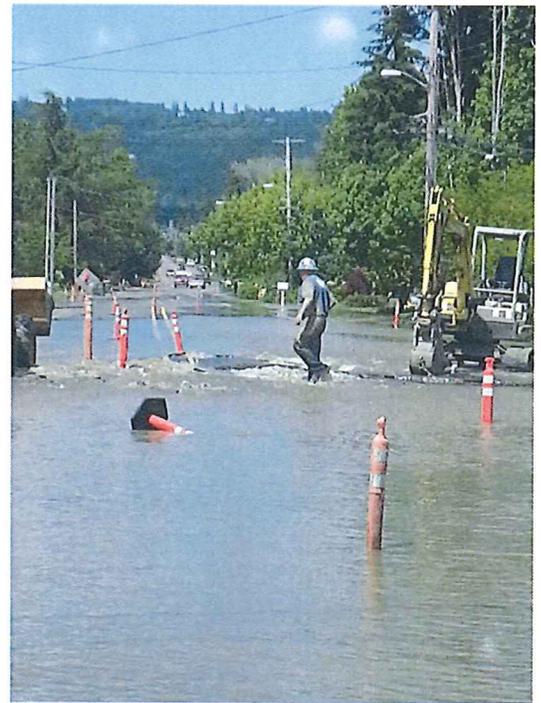
x	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
x	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

One of the reasons for the massive amount of flooding in 2014 when the waterline in College Street broke is the lack of valves on the existing line to shut the flow of water off. This project would add valves in strategic locations to minimize future problems. It will be coordinated some with the College Street Relocation project.

### Proposed Funding Sources:

This project is funded through the water utility.



# Water Program Project Summary Sheet

College Street Relocation

## Criteria Met:

Fiscal Year	Costs
2017/2018	\$470,000
<b>Project Total</b>	<b>\$470,000</b>

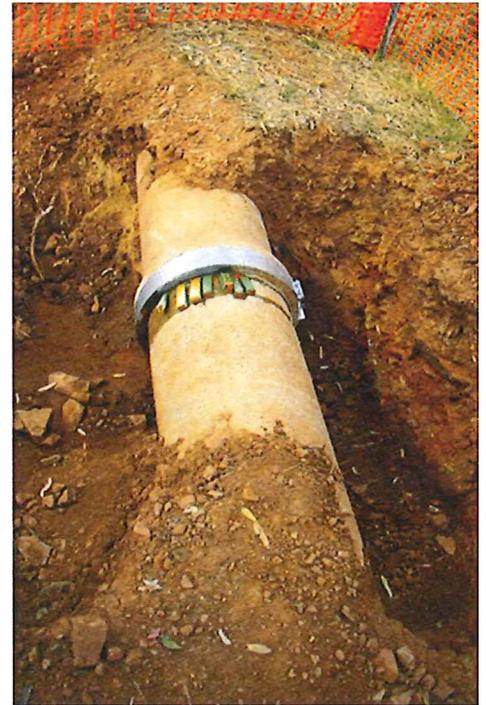
	Safety/Liability
	Council Goals
	Maintenance
	Required per Regulation
x	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

## Project Description:

The Oregon Department of Transportation will be extending sidewalks and bike lanes further north on the east side of College Street. As a part of this project the City's existing water line will need to be lowered as it is too shallow. This work is scheduled to begin in 2017/2018 and will be coordinated with the Valves project.

## Proposed Funding Sources:

This project is funded through the water utility.



# Water Program Project Summary Sheet

## New Hydrants and Valves

### Criteria Met:

Fiscal Year	Costs
2016/2017	\$20,000
2017/2018	\$20,000
2018/2019	\$20,000
<b>Project Total</b>	--

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

This funding would allow for the systematic replacement of valves and hydrants as they near their end of life.

### Proposed Funding Sources:

This project is funded through the water utility.



# Water Program Project Summary Sheet

Fixed Based Radio Read

### Criteria Met:

Fiscal Year	Costs
2019/2020	\$1,000,000
2020/2021	\$25,000
<b>Project Total</b>	--

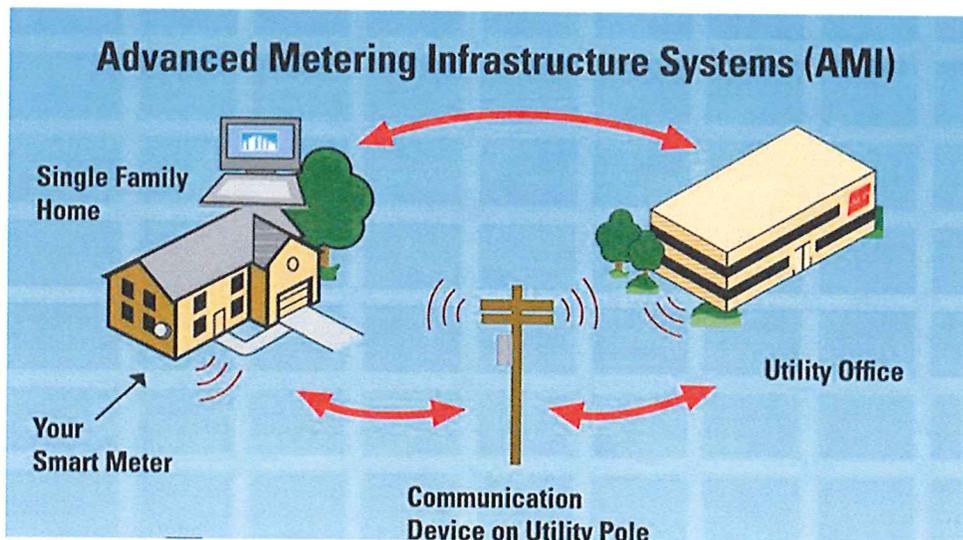
	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
x	Cost Reduction
	Future Capacity

### Project Description:

The existing meter reading system requires that someone drive through the entire city to read the meters. The fixed based system will allow for the meters to be read from the maintenance yard in real time. This will cut down on labor costs and could help catch a leak sooner.

### Proposed Funding Sources:

This project is funded through the water utility and SDCs. This project is 5% growth related.



# Water Program Project Summary Sheet

## Water Conservation Master Plan

### Criteria Met:

Fiscal Year	Costs
2018/2019	\$100,000
<b>Project Total</b>	<b>\$100,000</b>

	Safety/Liability
	Council Goals
x	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

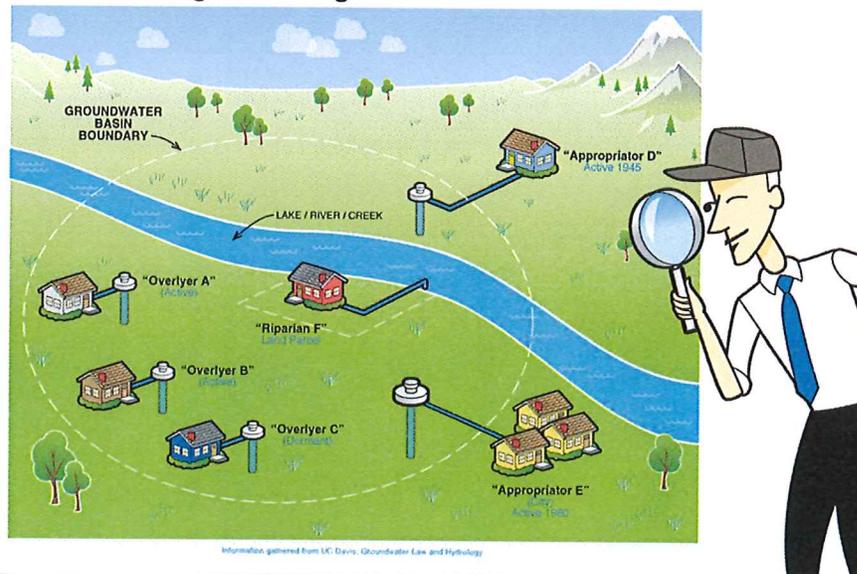
### Project Description:

The City is required by state law to have a water conservation plan. The last plan was adopted in 2007. This plan would also review our existing water rights and apply for reconfiguration if necessary.

### Proposed Funding Sources:

This project is funded through the water utility and SDCs. This project is 50% growth related.

### Understanding Water Rights



# Water Program Project Summary Sheet

Decommission Wells #1 & #2

### Criteria Met:

Fiscal Year	Costs
2018/2019	\$200,000
<b>Project Total</b>	<b>\$200,000</b>

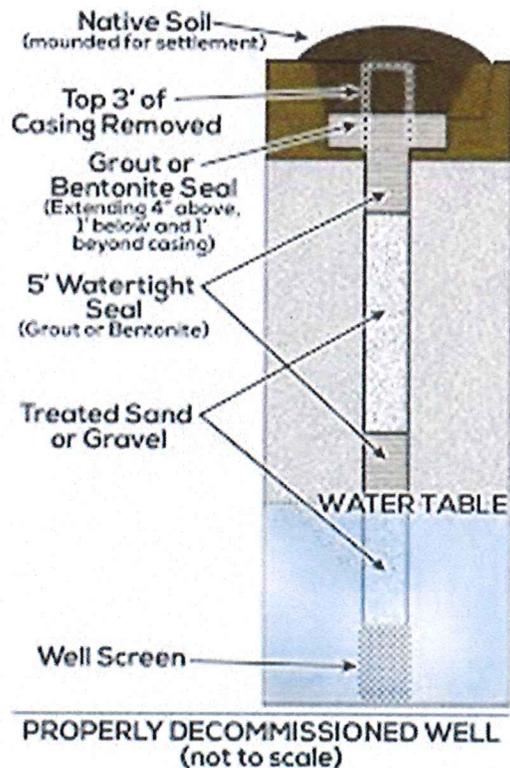
x	Safety/Liability
	Council Goals
	Maintenance
x	Required per Regulation
	Coordinates with Larger Project
	Existing Capacity
	Cost Reduction
	Future Capacity

### Project Description:

Wells #1 & #2 have reached the end of life and are not being utilized. This project would properly decommission the wells per state standards.

### Proposed Funding Sources:

This project is funded through the water utility.



# Water Program Project Summary Sheet

## General Piping Projects

### Criteria Met:

Fiscal Year	Costs
2017/2018	\$100,000
2018/2019	\$100,000
2019/2020	\$100,000
2020/2021	\$100,000
<b>Project Total</b>	--

	Safety/Liability
	Council Goals
x	Maintenance
	Required per Regulation
	Coordinates with Larger Project
x	Existing Capacity
x	Cost Reduction
x	Future Capacity

### Project Description:

This is a basic line to cover pipe looping, upsizing or replacements over the next 5 years. Once the master plan is completed, the City will have a better idea of which projects this might entail.

### Proposed Funding Sources:

This project is funded through the stormwater utility and SDCs. This project is 50% growth related.

