

March 22, 2022

## FISCAL YEARS 2022-2027



The Capital Improvement Program (CIP) is the implementation plan for identified software, City facilities, transportation, storm drainage, water, and wastewater projects. The CIP may change based on the community's needs, available budget, regulatory impacts, and other factors.

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# INTRODUCTION

The City Council Goals of Customer Service; Diversity, Equity, and Inclusion; Affordable Workforce Housing; Urban Renewal; and Sustainability flow directly and work in conjunction with the Community Vision that was adopted in 2019.

**A NEWberg Community Vision:** IN 2040, NEWBERG IS A GEM OF THE WILLAMETTE VALLEY – MIRRORING THE SURROUNDING PASTORAL LANDSCAPES, ITS CULTIVATED RELATIONSHIPS, FLOURISHING CULTURE, THOUGHTFULLY ENHANCED SENSE OF PLACE, STRONG LOCAL ECONOMY, AND COLLABORATIVE LEADERSHIP NOURISH OUR THRIVING COMMUNITY.

- COMMUNITY ENGAGEMENT In Newberg, engagement is a part of who we are. We give our time, talents and treasures to strengthen the community. We blend service into our jobs and institutions, help each other, and pride ourselves in donating and shopping locally. Our authentic relationships serve as a strong foundation for a supportive community
- COMMUNITY LEADERSHIP Our leaders come from diverse groups, backgrounds, and sectors throughout the community and surrounding region. They foster creative, two-way communications and collaborate to ensure Newberg's long-term success.
- CULTURAL ASSETS Newberg residents take pride in all that our community offers. As a cultural hub, there is a range of accessible artistic events and recreational activities as well as many local shops and restaurants you can wander into with friends.
- ECONOMIC DEVELOPMENT Newberg's economy thrives by leveraging our geographic amenities and the capabilities of local businesses and organizations. We create family wage jobs through a strong business and workforce development program. We retain and attract businesses to Newberg and have a vibrant downtown.
- LIVABILITY & DEVELOPMENT Newberg is a well-planned community where the built environment blends seamlessly into surrounding, natural landscapes. Our small-town character, accessibility and affordability create a sense of belonging where individuals, families, and people of all ages love to live, work, and play.

The capital infrastructure needs within the five-year Capital Improvement Program (CIP) are identified through a variety of sources, including master plans, City Council goals, the Community Vision, operational needs, regulatory obligations and funding availability. The City has completed updates of the utility system master plans over the last several years to address the reduced growth and demand shown in previous master plans and to incorporate the Riverfront Master Plan area. These plans show a variety of projects in all locations.

The City Council is committed to providing well maintained streets to our citizens when the Transportation Utility Fee was adopted and implemented in 2017. The goal was to maintain the current condition of the roadway system which is one of the most valuable assets the City owns. In the intervening years the City has improved a significant number of road segments and has maintained the overall condition of the asset. One complicating factor is the need for adequate utilities under the pavement. This provides the challenge of coordinating the roadway needs with the underground utility needs. The need for sidewalks and ADA facilities within our public access areas continue. There will be a renewed commitment to address those locations that will provide the greatest benefit (i.e. Critical Routes noted in the 2007 ADA Pedestrian Bike Plan; and School Routes).

The City continues to focus its efforts toward establishing a high quality and adequate potable water supply, storage, and distribution system. The City's utility systems are vulnerable to damage resulting from a Cascadia Subduction Zone earthquake. Because of this and other regulatory requirements, rather than trying to retrofit the existing 70-year-old water treatment plant the City will embark on a process to replace our groundwater treatment

plant with a new groundwater treatment plant. Phases 1 & 2 of the Safe, Reliable Water project were completed in 2020, and Phase 3 of the project is moving forward based on the City Council's direction to provide additional resiliency to the City's potable water system.

As in the past, the focus of the wastewater program is to aggressively repair and/or replace inadequate portions of the wastewater system. Several projects to eliminate and/or reduce the stormwater that infiltrate the wastewater pipes were completed in the last several years and there has been a noticeable reduction (37%) in Inflow and Infiltration in those basins. These projects will continue. The City will continue upgrades to the Wastewater Treatment Plant with roofing repairs, studies addressing the capacity of the plant and will start on larger growth-related projects and addressing our larger trunk lines.

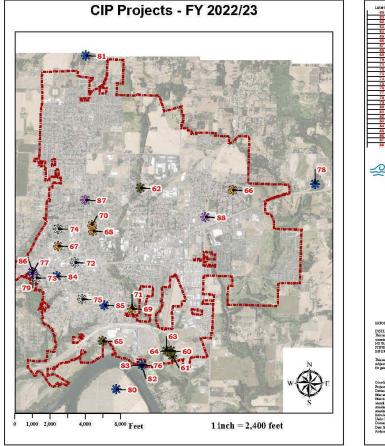
Capital projects within the City are funding by a variety of mechanisms. They include:

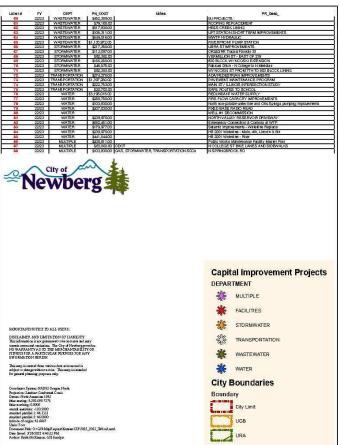
- Enterprise Funds: these funds are revenues from monthly rates (water, wastewater and stormwater) paid by customers. These funds can only be spent on projects in those systems.
- Gas Taxes: these are revenues from both Federal and State gas taxes. These funds can only be spent on roadway projects. At least 1% of the state gas taxes must be spent on bicycle and pedestrian facilities.
- Transportation Utility Funds: these are revenues paid monthly by customers. These funds must be used on existing pavement and ADA requirements.
- System Development Charges: these funds are paid by developers and can only be used on capacity increasing projects.
- Grants: these are funds received from a variety of locations.

The Public Works Engineering Division works closely with Public Works Operations and Maintenance Divisions to complete the identified projects on an annual basis. The fiscal year 2022-2023 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 2022-2023 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.

	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
Total Wastewater Projects	\$4,128,247	\$2,835,357	\$2,495,744	\$4,683,830	\$4,436,009	\$3,811,510
Total Stormwater Projects	\$312,500	\$826,352	\$315,374	\$380,895	\$892,538	\$661,189
Total Transportation Projects	\$2,277,141	\$1,914,978	\$1,801,133	\$1,890,859	\$2,289,927	\$1,779,763
Total Water Projects	\$ 2,549,663	\$7,843179	\$3,127,034	\$6,477,074	\$8,299,712	\$2,067,104
Total Multi-Funded Projects	\$7,353,328	\$3,621,061	\$482,052	\$1,410,206	\$459,008	\$534,458
Total Capital Project Program	\$15,911,220	\$17,900,927	\$8,221,338	\$ 14,842,863	\$16,377,195	\$8,854,025

A map of the Capital Improvement Projects for FY 2022-2023 is shown on the following page.





# **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 facilities, capital projects that address more than one system and major software purchases.

MULTI FUNDED PROJECTS		FY21/22		FY22/23		FY23/24		FY24/25		FY25/26	FY26/27
Public Works Maintenance Facility Master Plan	\$	114,419	\$	208,811	\$	160,684	\$	166,308	\$	172,128	\$ 178,153
N College Street Bike Lanes and Sidewalks/Waterline											
Relocation/Additional Valves	\$	60,000	\$	910,000	\$	-	\$	-	\$	-	\$ -
N Springbrook Road	\$	39,500	\$	103,500	\$	321,368	\$	1,243,898	\$	286,880	\$ 356,305
NE Chehalem Drive Water & Wastewater Ext	\$	1,680,000	\$	258,750	\$	-	\$	-	\$	-	\$ -
N Elliott Road: 99W to Newberg High School	\$	3,014,639	\$	3,000,000	\$	-	\$	-	\$	-	\$ -
E Crestview Drive: 99W to Springbrook Road	\$	1,735,111	\$	-	\$	-	\$	-	\$	-	\$ -
TOTAL MULTI FUNDED PROJECTS	\$	6,643,669	\$	4,481,061	\$	482,052	\$	1,410,206	\$	459,008	\$ 534,458

## MULTI-FUNDED PROJECT

Maintenance Facility Project

A master plan has been completed on what the newly expanded maintenance yard could look like. The rest of the improvements include major site work, covers for large equipment, a fleet building and additional office space. A fully functional maintenance facility is critical to serve the existing and long-term day to day needs of the City and to adequately respond to natural disasters with the needed man power and equipment.

## PROPOSED FUNDING

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

## MEDIUM PRIORITY PROJECT

The council has identified increased sustainability as priorities for Newberg. The proposed improvements will further this goal. Along with responding to council goals the project will:

- Increase health and safety
- Reduce costs
- Provides for existing and future capacity

## **HISTORY OF THE PROJECT**

In 2015, it was determined that the City had outgrown the existing 2.1 acre maintenance yard and purchased property next to the existing location to expand the yard by 3.9 acres. A facility plan was then conducted to determine the specific needs on this site.

# STATE MANDATED FEATURES

## **CONTACT**

maintenance@newbergoregon.gov

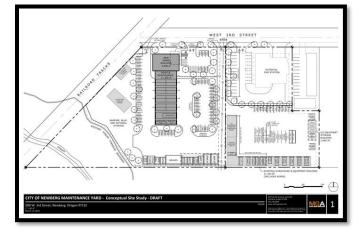


FIGURE 1 CONCEPTUAL PUBLIC WORKS MAINTENANCE YARD PLAN

## **MULTI-FUNDED PROJECT**

N College Street Bike Lanes & Sidewalks/Waterline Relocation/Additional Valves

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. The City has entered into an Intergovernmental Agreement with ODOT on this project. Final design and right-ofway acquisition will be underway soon. The construction should occur in 2023.

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 soon and will be coordinated with the waterline valve project. The waterline project will utilize ODOT's topographic survey.

## PROPOSED FUNDING

The project will be funded by ODOT Surface Transportation Project Fund (STP), gas tax revenues, and water rates.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Improving roads and constructing sidewalks and bike lanes will provide better access to the City and encourage more walking and bike use. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs
- Coordinates with larger planned projects
- Has additional funding opportunities available

## **HISTORY OF THE PROJECT**

One of the reasons for flooding in 2014, when the waterline in College Street broke, was the lack of valves on the existing line to shut the flow of water off. This project will be a continuation of the project that was completed four years ago and would add valves in strategic locations to minimize future problems.

#### **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

- ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.
- The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## **CONTACT**

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FIGURE 2 LOOKING NORTH ON COLLEGE STREET

## **MULTI-FUNDED PROJECT**

N Elliott Road; 99W to Newberg High School

This project will construct street improvements to provide sidewalks and bike lanes. It will also include water line, wastewater line, storm drainage improvements and street lighting.

## PROPOSED FUNDING

The project will be funded by gas tax revenues, wastewater fees, water fees, stormwater fees and system development charges. There will also a contribution from the State's Active Transportation Program to upgrade the signal at 99W.

## **HIGH PRIORITY PROJECT**

N Elliott Road intersects at one of a few traffic signals along Highway 99W and connects to the south entrance of Newberg High School. It also links residents to Mabel Rush Elementary, the Chehalem Aquatic and Fitness Center, as well as YC Transit buses and local businesses on OR99W.

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Improving roads and constructing sidewalks and bike lanes will provide better access to the high school and encourage more walking and bike use. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs

## **HISTORY OF THE PROJECT**

The Transportation System Plan has identified this project as a high priority as it provides direct access to the high school. The adopted ADA/Bike/Ped Plan and the Newberg Community Vision document also identifies N Elliott Road as a critical route.

## **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

• ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.

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#### **CONTACT**

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## **MULTI-FUNDED PROJECT**

N Springbrook Road

This project will provide sidewalks and bike lanes north of 99W. It will also install a signal at the intersection of N Haworth and N Springbrook Road wastewater upgrades and storm drainage.

#### PROPOSED FUNDING

This project will be funded by gas taxes, stormwater fees and transportation system development charges. There are also fees that have been paid by developers specifically for the installation of a signal at N Haworth & N Springbrook.

## MEDIUM PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Improving roads and constructing sidewalks and bike lanes will provide better access and encourage more walking and bike use. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs
- Coordinates with larger planned projects
- Has additional funding opportunities available

## **HISTORY OF THE PROJECT**

There are existing storm drainage issues along this section of N Springbrook Road. The intersection at N Haworth and N Springbrook meets the necessary warrants for the installation of a signal to replace the existing Four-Way Stop traffic control.

## **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

- ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.
- The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## <u>CONTACT</u>



FIGURE 3 INTERSECTION OF N SPRINGBROOK AND E HAWORTH

## **MULTI-FUNDED PROJECT**

NE Chehalem Drive Water & Wastewater Extension Project

This project extends the public wastewater line from the existing terminus on the east side of Chehalem Creek on Hwy 240 to NE Chehalem Drive and then north on NE Chehalem Drive towards the intersection with W Columbia Drive.

This master plan project (M-18) would extend the public water line from the existing terminus on the east side of Chehalem Creek on Hwy 240 to NE Chehalem Drive. The new waterline will connect with an existing waterline on NE Chehalem Drive south of Hwy 240. A future project (M-19) would extend the waterline on NE Chehalem Drive to W Columbia Drive.

## PROPOSED FUNDING

This will be paid for out of system development charges.

## MEDIUM PRIORITY PROJECT

This project will provide additional capacity for future development. Fire flow deficiencies in the area of W Illinois are also addressed with this project.

## **HISTORY OF THE PROJECT**

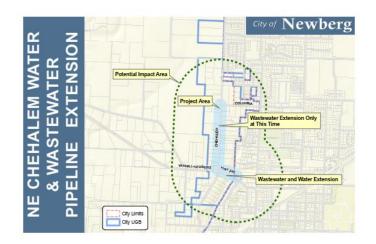
There have been several development inquiries in this area and the wastewater and water line extensions would allow for orderly future development. The 2017 Water Master Plan identified that this area has a fire flow and pressure deficiency. The cost and complexity of designing, constructing and permitting utility crossings of the un-named tributary of Chehalem Creek has been identified as prohibitive for private development of the water and wastewater extensions to this portion of the City's Urban Growth Boundary (UGB).

## **MANDATED FEATURES**

NA

## **CONTACT**

brett.musick@newbergoregon.gov



#### FIGURE 4 EXTENDING THE PUBLIC WASTEWATER LINE

Visit the NE Chehalem Drive Water and Wastewater Extension Project webpage

# **TRANSPORTATION PROJECTS**

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

The funding sources for the roadway maintenance budget is the City's share of the state gas tax revenue and the transportation utility fee (TUF). A secondary funding source for roadway improvements is system development charges (SDC), and can only be used for new roadway construction, not maintenance projects.

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

TRANSPORTATION PROJECTS		FY21/22		FY22/23		FY23/24		FY24/25		FY25/26	FY26/27	
ADA/Sidewalk Improvements	\$	449,917	\$	274,275	\$	194,296	\$	210,123	\$	227,798	\$	235,771
Pavement Maintenance Program	\$	1,647,224	\$	1,397,250	\$	1,606,838	\$	1,552,205	\$	1,377,028	\$	1,543,992
Main Street/Illinois Intersection Study (I14)	\$	50,000	\$	222,753	\$	-	\$	-	\$	-	\$	-
Safe Routes to School	\$	130,000	\$	20,700	\$	-	\$	-	\$	-	\$	-
TSP Update	\$	-	\$	-	\$	-	\$	128,531	\$	-	\$	-
Mountainview Drive	\$	-	\$	-	\$	-	\$	-	\$	685,101	\$	-
TOTAL TRANSPORTATION PROJECTS	\$	2,277,141	\$	1,914,978	\$	1,801,133	\$	1,890,859	\$	2,289,927	\$	1,779,763

## **TRANSPORTATION PROJECT**

ADA/Bicycle/Pedestrian Improvements

Current utility maintenance projects include replacement or installation of ADA accessible barriers identified in the Plan. The City will continue to fill in the sidewalk gaps on City property and public rights-of-way. Sidewalk Grant and Loan programs have been implemented to provide resources to property owners.

## PROPOSED FUNDING

This project is funded 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.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Improving and constructing sidewalks and bike lanes will allow community members better access to locations within the City and encourage more walking and bike use. Additionally, it is required by Federal and State Law.

## HISTORY OF THE PROJECT

City Council adopted the ADA/Pedestrian/Bike Plan in 2007, which was then incorporated into the Transportation System Plan. There have been over 90,000 feet of new sidewalks and over 200 new ADA ramps constructed since 2007.

This project includes the construction of ADA ramps on N Meridian Street from Hancock north to Fulton Street. This portion of the project is being funded by an ARPA grant received from the State.

## **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

- ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.
- The ADA law requires newly designed and constructed or altered State and local

government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

#### CONTACT



## **TRANSPORTATION PROJECT**

**Pavement Preservation** 

The pavement preservation projects proposed for 2022/23 are shown on the accompanying Table T1. Other streets that have been identified for major treatments (grind and inlay, thin pave, or full depth reconstruction) beyond FY 2022/23 are E Madrona, N Gemini, E Coffey, N Meadow, N Cedar, N Springbrook Wy, N Villa, S Chehalem, E Sunset, E Greenvalley, N Prospect, and E Aldercrest.

Prioritization of the projects in the five year plan was based on: existing pavement condition, functional classification, traffic volumes, neighborhood grouping, and proximity to schools, business districts, or civic corridors, subsurface utility conditions, treatment costs and funding amounts.

The projects that have been completed since the implementation of the Transportation Utility Fee has maintained the Pavement Condition Index of 73.

## PROPOSED FUNDING

Anticipated TUF revenue is approximately \$1,200,000 per year.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Improving roads and constructing sidewalks and bike lanes will provide better access to the City. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs
- Coordinates with larger planned projects

## HISTORY OF THE PROJECT

The Transportation Utility Fee (TUF) was implemented in the summer of FY17/18. The goal is to maintain the Pavement Condition Index of 73 over a ten year horizon.

## STATE MANDATED FEATURES

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

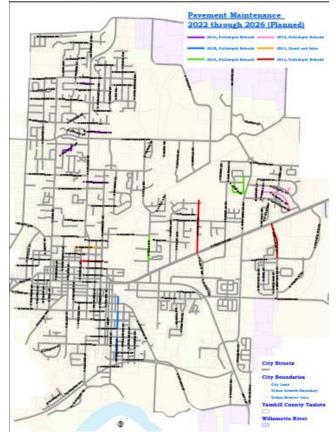
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• The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## <u>CONTACT</u>

paul.chiu@newbergoregon.gov

SecID	Street	From	To	PCI	Length	Year	
Full-Dept	th Rebuild						
rd2608	N BRUTSCHER ST	N LITTLE OAK ST	E PORTLAND RD	44	974	2022	
rd4902	N BRUTSCHER ST	E HAYES ST	N LITTLE OAK ST	43	526	2022	
rd4683	E SHERMAN ST	N SCHOOL ST	N COLLEGE ST	14	329	2022	
rd4695	E SHERMAN ST	N COLLEGE ST	N EDWARDS ST	25	318	2022	
rd4778	E SHERMAN ST	N EDWARDS ST	N MERIDIAN ST	32	255	2022	
					2402		



#### Newberg Pavement Projects: 2022-2026

## TRANSPORTATION PROJECT

N Main Street/E Illinois Street Intersection Study

This project would perform a special study to determine the appropriate intersection improvements to address safety and mobility needs. Realignment of the intersection may be required.

## PROPOSED FUNDING

Gas tax revenues and system development charges.

## MEDIUM PRIORITY PROJECT

The project will increase health and safety.

## **HISTORY OF THE PROJECT**

This is project I-14 in the Transportation System Plan. This highway intersection was realigned from a skewed angle to a 90 degree intersection in 2006, forcing traffic to slow down prior to making a right turn to City street. This intersection has had a history of collisions and close calls.

## **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

- ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.
- The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## <u>CONTACT</u>



FIGURE 5 N MAIN INTERSECTION AT ILLINOIS STREET

## **TRANSPORTATION PROJECT**

Safe Routes to School

The City of Newberg has received a \$122,000 grant from the Oregon Department of Transportation to implement elements from Phase 1 Edwards Elementary Safe Routes to School Plan, drafted in the summer of 2020. The plan aims to improve the safety of students and reduce barriers for students walking and biking to school.

The grant funds the installation of pedestrian crossing signs along E Sixth Street, stop signs at E Sixth Street and S River Street, construction of curb ramps along E Sixth Street, S Blaine Street, and S River Street, and fillings gaps in sidewalks along S Blaine Street.

## PROPOSED FUNDING

Gas tax revenues and Safe Routes to School Grant.

## HIGH PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Constructing sidewalks and bike lanes will not only make a safer path to Edwards Elementary, but will also increase walkability in the neighborhoods, giving families and individuals a safer route to downtown Newberg.

## HISTORY OF THE PROJECT

Safe Routes to School (SRTS) is a program in Oregon that aims to make schools and communities safer by combining improvements in pedestrian transportation with education and activities to enable and encourage students to walk and bicycle to school. SRTS plans not only improve safety, they also encourage physical activity, increase access to school, and reduce traffic congestion and motor vehicle emissions near schools.

## **MANDATED FEATURES**

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

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• The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## <u>CONTACT</u>

brett.musick@newbergoregon.gov





Visit the Edwards Elementary SRTS Plan webpage

## **TRANSPORTATION PROJECT**

Transportation System Plan

This project will be a complete update of the City's Transportation System Plan. This will include new traffic counts, modeling and an extensive public outreach effort.

## PROPOSED FUNDING

Gas tax revenues and system development charges.

## PRIORITY PROJECT

This is a regulatory requirement that must be completed by the City.

## **HISTORY OF THE PROJECT**

The last major update of the Transportation Plan was completed in 2016. The plans are generally updated every 10 years.

## **MANDATED FEATURES**

OAR 660-011 mandates the requirements of the Transportation System Plan.

## **CONTACT**

engineering@newbergoregon.gov

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## TRANSPORTATION PROJECT

E Mountainview Drive Improvements

Reconstruct E Mountainview Dr between N Villa Rd and N Alice Way to minor arterial standards. Include bike lanes and sidewalks on both sides.

## PROPOSED FUNDING

Gas tax revenues and system development charges.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Improving roads and constructing sidewalks and bike lanes will provide better access to the City and encourage more walking and bike use. Along with responding to council goals the project will:

- Increase health and safety
- Has additional funding opportunities
  available

## HISTORY OF THE PROJECT

This is project E11a in the Transportation System Plan.

## MANDATED FEATURES

The state and federal governments require that bike facilities and ADA facilities be constructed on any roadway that will be constructed, reconstructed or relocated.

- ORS366.514, enacted in 1971, requires that roadways being built, or reconstructed, include both pedestrian and bicycle facilities.
- The ADA law requires newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

## <u>CONTACT</u>



## **STORMWATER PROJECTS**

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

The 2021 Stormwater Master Plan 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 PROJECTS	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
S Blaine Street; Hancock - 2nd to 11th Street	\$ -	\$ -	\$ -	\$ 242,305	\$ 404,841	\$ 192,760
Libra Street Improvements (Libra and Coffey)	\$ 100,000	\$ 217,350	\$ -	\$ -	\$ -	\$ -
OR240/Railroad Tracks/Franklin Street Study & then Fix	\$ -	\$ 113,097	\$ -	\$ -	\$ -	\$ 141,816
Vermillion Street East of 219	\$ -	\$ 82,352	\$ -	\$ -	\$ -	\$ -
800 Block Wynooski Extension	\$ 75,000	\$ 155,250	\$ -	\$ -	\$ -	\$ -
Master Plan	\$ 2,500	\$ -	\$ -	\$ -	\$ 344,257	\$ 59,384
Railroad Ditch between N College & N Meridian Study & Fi	\$ -	\$ 46,575	\$ 127,910	\$ -	\$ -	\$ -
Wynooski Storm from 7th to 800 Block Lining	\$ -	\$ 82,353	\$ -	\$ -	\$ -	\$ -
1800 N Hoskins Pipe Extension	\$ -	\$ -	\$ 53,561	\$ -	\$ -	\$ -
MP Projects (placeholder for future projects identified in t	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 118,769
Pavement Fixes/ Annual Pipe Replacement Program (SWN	\$ 135,000	\$ 129,375	\$ 133,903	\$ 138,590	\$ 143,440	\$ 148,461
TOTAL STORMWATER PROJECTS	\$ 312,500	\$ 826,352	\$ 315,374	\$ 380,895	\$ 892,538	\$ 661,189

## **STORMWATER PROJECT**

S Blaine Street; E Hancock to E Eleventh Street

The project will decommission the existing stormwater pipes and construct a new 24" stormwater mainline along S Blaine and E Second 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.

## PROPOSED FUNDING

This project is funded by the stormwater utility fee and a small amount of system development charges. Due to funding constraints, the project is scheduled to be constructed in phases over several fiscal years. The first two phases of construction are complete.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to council goals the project will increase health and safety and reduce costs.

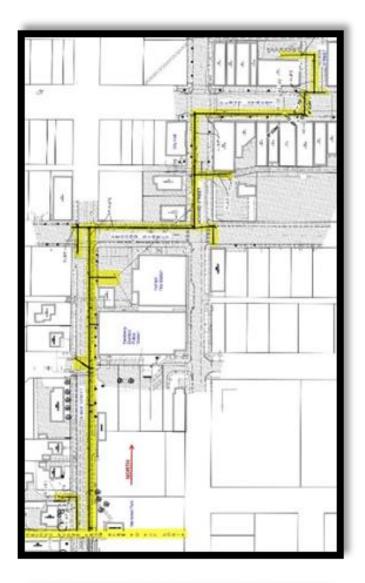
## **HISTORY OF THE PROJECT**

Flooding occurs in the system during the 10 year storm event including 99W, E Second Street, S Howard Street and at E Sixth Street and S Blaine Street. Large segments of the existing pipe are constructed of corrugated metal and are near end of life. The outfall and southern downstream portion of this storm conveyance system was completed in 2017/2018. This project will complete the northern upstream portion.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> engineering@newbergoregon.gov





## **STORMWATER PROJECT**

800 Block of NE Wynooski Street

This project would extend the outfall east of S Wynooski Street further down the slope to reduce erosion.

## PROPOSED FUNDING

This project will be paid for out of utility rates.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

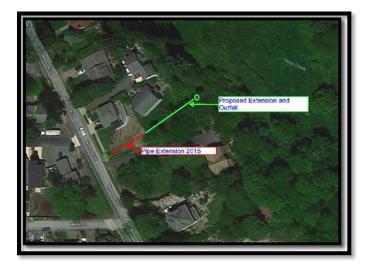
## **HISTORY OF THE PROJECT**

The current pipe and outfall have severely eroded the area east of NE Wynooski Street.

## **MANDATED FEATURES**

NA

## <u>CONTACT</u>





## STORMWATER PROJECT

RR Ditch; N College – N Meridian

This area of the system has a variety of contributing flooding factors and likely needs to be studied to determine what the "fix" would be and where the stormwater should be routed. It should also be noted that a paving project is scheduled to pave N Meridian Street in the area circled, but a possible solution to the flooding issues in this area could be to connect the stormwater line north of the railroad tracks to the south at E Vermillion Street.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## HISTORY OF THE PROJECT

This area floods with heavy rainfall events.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> engineering@newbergoregon.gov



## STORMWATER PROJECT

Wynooski Storm Lining

This project would be to line an existing 10 inch storm pipe that has problems with root intrusion.

#### PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## **HISTORY OF THE PROJECT**

This section of 10-inch pipe is clay with root blockage problems (segment stgm 2497). The limits of this project are adjacent to the 800 Block S Wynooski project.

## **MANDATED FEATURES**

NA

## **CONTACT**



## **STORMWATER PROJECT**

E Vermillion Street East of OR219

This project would install a new stormwater pipe to eliminate the flooding in this area.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## **HISTORY OF THE PROJECT**

There is localized flooding in this area.

## MANDATED FEATURES

NA

## CONTACT



## STORMWATER PROJECT

OR240/RR Tracks/N Franklin Street

The existing storm pipe will need to be relocated from under the existing building.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## **HISTORY OF THE PROJECT**

This is an area of town where a diagonal pipe that runs under a building causes flooding in the area. The inlet north of the building overflows during storm events. The building owner places sandbags around the building to prevent flooding. Under the building the pipe is too long for it to be cleaned with the City's current equipment.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> engineering@newbergoregon.gov



## **STORMWATER PROJECT**

Stormwater Master Plan Update

This project will be a complete update of the City's Stormwater Master Plan. This will include new flow monitoring, modeling and an extensive public outreach effort.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

This is a regulatory requirement that must be completed by the City. Per the NMC, the Stormwater Master Plan is required to be updated every 5 years.

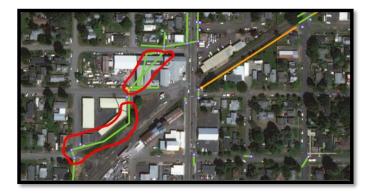
## **HISTORY OF THE PROJECT**

The last update was completed in 2021. The next update is required 2026.

## **MANDATED FEATURES**

OAR 660-011 mandates the requirements of the Stormwater System Plan.

#### CONTACT



## STORMWATER PROJECT

N Hoskins Storm Drainage

This project will extend the existing storm line to eliminate an existing flooding problem on N. Hoskins.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## **HISTORY OF THE PROJECT**

This is an area of town where the current public line ends on private property and doesn't provide for downstream conveyance which causes flooding in the area.

## **MANDATED FEATURES**

NA

## CONTACT



## STORMWATER PROJECT

Misc. Storm Drain Repairs

As the Pavement Rehabilitation projects move forward, there are storm drainage repairs that need to be accomplished. This will allow those to occur ahead of or with the pavement projects.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety and reduce costs.

## **HISTORY OF THE PROJECT**

In many older areas of the City, the storm drainage has not be adequately addressed.

## **MANDATED FEATURES**

NA

## **CONTACT**



## STORMWATER PROJECT

N Libra Street

Upsize existing stormwater pipes along N Libra Street to 18" to convey current and future flows.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## MEDIUM PRIORITY PROJECT

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to Council goals the project will increase health and safety.

## **HISTORY OF THE PROJECT**

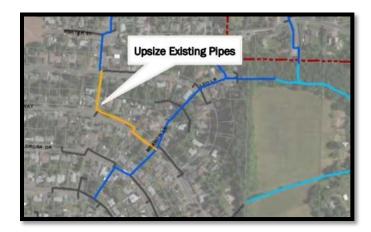
Modeling shows flooding problems along N Libra Street during the current and future conditions 10year storm event. This system needs frequent maintenance to address silt accumulation.

## **MANDATED FEATURES**

NA

## <u>CONTACT</u>

brett.musick@newbergoregon.gov



## STORMWATER PROJECT

Master Plan Projects

This is a placeholder for projects that arise out of the master plan that will occur in 2026.

## PROPOSED FUNDING

This project will be paid for by the stormwater rate revenues.

## PRIORITY PROJECT

NA

## **HISTORY OF THE PROJECT**

The Stormwater Master Plan is will provide additional necessary projects.

MANDATED FEATURES

## CONTACT



## **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 lift stations, wastewater treatment plant, and wastewater collection and conveyance system.

The following project list was developed from the 2018 Wastewater Master Plan and other associated studies, while considering the available funds from the wastewater utility rates and system development charges.

WASTEWATER PROJECTS	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
Inflow & Infiltration (I&I) Projects	\$ 520,000	\$ 452,389	\$ 482,270	\$ 514,124	\$ 548,081	\$ -
WWTP Sawdust Bays	\$ 108,167	\$ -	\$ -	\$ -	\$ -	\$ -
Operations Remodel	\$ 81,000	\$ -	\$ -	\$ -	\$ -	\$ -
Compost Sale Pile Cover	\$ -	\$ -	\$ 204,964	\$ -	\$ -	\$ -
Roofing Replacement	\$ -	\$ 79,168	\$ -	\$ -	\$ -	\$ -
Hess Creek Lining	\$ 250,000	\$ 517,500	\$ -	\$ -	\$ -	\$ -
Structural Improvements to Oxidation Ditch	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ -
I & I Report	\$ -	\$ -	\$ 241,135	\$ -	\$ -	\$ -
Dehydration Unit Burner Rebuild	\$ 68,959	\$ -	\$ -	\$ -	\$ -	\$ -
PLC Study and Replacment	\$ 1,525,000	\$ -	\$ -	\$ -	\$ -	\$ -
Master Plan Update	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 146,070
Pinehurst Court	\$ -	\$ -	\$ 361,702	\$ -	\$ -	\$ -
Lift Station Short Term Improvements	\$ -	\$ 106,311	\$ -	\$ -	\$ -	\$ 1,219,689
WWTP Hydraulic	\$ -	\$ 549,016	\$ -	\$ -	\$ -	\$ -
Clarifier Study	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -
Hess Creek Phase 2	\$ -	\$ -	\$ -	\$ 1,927,962	\$ 2,740,405	\$ 1,336,752
Riverfront Lift Station	\$ 212,180	\$ 1,130,972	\$ 1,205,673	\$ 1,330,461	\$ 1,147,523	\$ -
N. Springbrook Trunkline	\$ -	\$ -	\$ -	\$ 911,283	\$ -	\$ -
WWTP Solar Panel Farm	\$ 602,941	\$ -	\$ -	\$ -	\$ -	\$ -
Charles & Andrew PS Displacement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,109,000
TOTAL WASTEWATER PROJECTS	\$ 4,128,247	\$ 2,835,357	\$ 2,495,744	\$ 4,683,830	\$4,436,009	\$3,811,510

## WASTEWATER PROJECT

Dehydration Unit Burner Rebuild

The dehydration unit at the Waste Water Treatment Plant is used to dry sawdust for our composting process. The burner on the dehydration unit provides the heat for drying the sawdust, and typically runs around 1,400 degrees. The burner is a steel tower structure that is lined with fire brick on the inside to protect the steel from the high heat environment. The rebuild involves removing all the existing brick, stacking new brick and installing a coating over the top of it which reduces the erosion of the brick and extends the life.

## PROPOSED FUNDING

This project will be paid by the wastewater rate revenues.

## MEDIUM PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will reduce costs.

## **HISTORY OF THE PROJECT**

The Dehydration Unit went online in December 2009, the burner had to be rebuilt in 2012 as it did not originally include protective coating. Based upon the most recent inspection in 2021, the fire brick is showing signs of wear and needs to be replaced.

## **MANDATED FEATURES**

NA

## CONTACT

operations@newbergoregon.gov





FIGURE 6 DEHYDRATION UNIT BURNER BEFORE AND AFTER CONDITION

## WASTEWATER PROJECT

Wastewater Master Plan Update

This project will be a complete update of the City's Wastewater System Plan. This will include new flow monitoring, modeling and an extensive public outreach effort.

## PROPOSED FUNDING

Wastewater revenues and system development charges.

## PRIORITY PROJECT

This is a regulatory requirement that must be completed by the City.

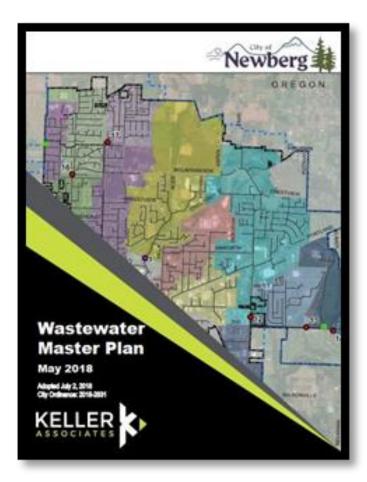
## **HISTORY OF THE PROJECT**

The last major update of the Wastewater Plan was completed in 2018. The plans are generally updated every 10 years.

## **MANDATED FEATURES**

OAR 660-011 mandates the requirements of the Wastewater System Plan.

## **CONTACT**



## WASTEWATER PROJECT

Charles & Andrews Lift Stations Decommissioning

After the construction of the Riverfront Lift Station and associated trunk lines, the existing Charles Street and Andrews Lift Stations can be removed. This will advance one of the goals of the last master plan to reduce the overall number of lift stations in the City.

## PROPOSED FUNDING

This project will be paid by the wastewater rate revenues and system development charges.

## MEDIUM PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will reduce costs.

## **HISTORY OF THE PROJECT**

These 2 lift stations have been in operation for several years but are not adequate to serve future growth in the southern portion of the City.

## MANDATED FEATURES

NA

<u>CONTACT</u> engineering@newbergoregon.gov



## WASTEWATER PROJECT

Inflow and Infiltration Projects

The goal of the project is to rehabilitate or replace the aging pipe infrastructure to reduce the maintenance costs and the stormwater Inflow & Infiltration into the City's wastewater collections system.

This year's projects are rehabilitation of pipes and laterals in in the area of S Charles Street.

The work that has been completed over the last six years has reduced the amount of stormwater and ground water reaching the treatment plant by 37%.

#### PROPOSED FUNDING

This will be paid for out of wastewater rate and system development charge funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will reduce costs.

## **HISTORY OF THE PROJECT**

The 2015 Inflow and Infiltration (I/I) Report identified the need for significant replacements/rehabilitation of the older sections of the wastewater collections system throughout the City. This report was validated by the Wastewater Master Plan that was adopted in 2018.

## **MANDATED FEATURES**

NA

## CONTACT

brian.kershaw@newbergoregon.gov

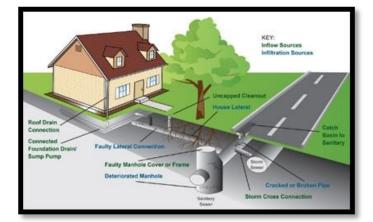


FIGURE 7 INFLOW & INFILTRATION PROGRAM

## WASTEWATER PROJECT

Roofing Replacement at the Wastewater Treatment Plant

The building roof and gutter replacements completed to date include: compost mixing building, operations building, effluent building and compost tunnels. The final roof/gutter replacement that will be needed in the immediate future is the disinfection building and the secondary building. The screw press room has the only remaining original 1987 roof, but shows no signs of issues so will be a low priority for now and continue to be rolled into the future.

## PROPOSED FUNDING

This will be paid for out of wastewater rate funds.

## PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg. Maintaining our existing facilities will reduce the need to replace them in the future.

## HISTORY OF THE PROJECT

The maintenance of roofs and gutters on the existing buildings at the 1980's treatment plant buildings was deferred by prior administrations.

## MANDATED FEATURES

NA

<u>CONTACT</u> operations@newbergoregon.gov

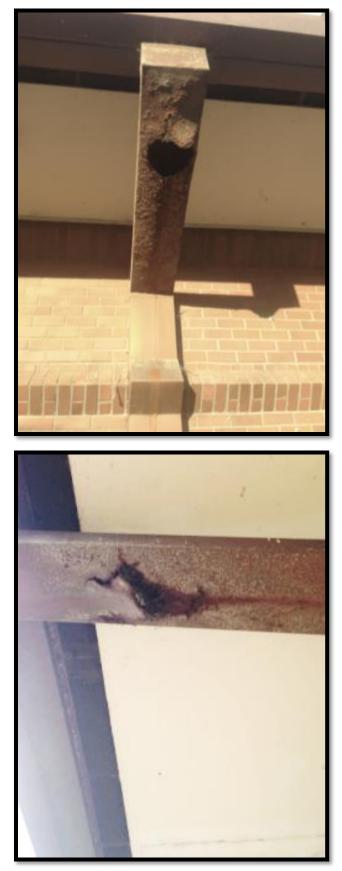


FIGURE 8 ROOF MAINTENANCE AT WASTEWATER TREATMENT PLANT

## WASTEWATER PROJECT

Compost Sale Pile Cover

This project is to install a cover over the compost that accumulates over the winter months on our sale pile.

## PROPOSED FUNDING

This project will be paid by the wastewater rate revenue funds.

## LOW PRIORITY PROJECT

This project will reduce operational costs.

## **HISTORY OF THE PROJECT**

There are several benefits to covering this compost. The first is to prevent the rain from washing solids out of the compost pile and back into the plant, which then requires us to send those solids back through the treatment process. The second is that it would provide a higher quality product for our customers that come in during the spring, which is our busiest time of year for compost sales. A third potential benefit is that some of this dry compost could be used for dry recycle during the wet months and allowing us to increase our composting efficiency in the winter months when dry recycle is hard to come by.

## MANDATED FEATURES

NA

<u>CONTACT</u> <u>operations@newbergoregon.gov</u>



Figure 9 COMPOST PILE



Figure 10 EXAMPLE OF COVER

## WASTEWATER PROJECT Programmable Logic Controller Study and Replacement

The Programmable Logic Controller (PLC) is the system which provides the ability to run the treatment plant in an automatic mode. Currently we are relying on a 3<sup>rd</sup> party to support parts for the PLC but they could stop production at any time, making our system obsolete. The purchase and implementation of the new system is underway.

## PROPOSED FUNDING

This project will be funded using the wastewater rate funds. The City also received a grant from Yamhill County to help fund this project.

## HIGH PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg.

## **HISTORY OF THE PROJECT**

The Siemens PLC was installed in the late 1990's and is nearing its life expectancy. The PLC we currently use is no longer being made by Siemens.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> operations@newbergoregon.gov





FIGURE 11 PLC

## WASTEWATER PROJECT

Inflow and Infiltration Report

Compiled data will be used to complete a full report of the pipe performance in several basins and will evaluate the effectiveness of the work that the City has completed over the last several years.

## PROPOSED FUNDING

This project will be funded by the wastewater rate and SDC funds.

## HIGH PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will reduce costs.

## **HISTORY OF THE PROJECT**

An Inflow and Infiltration (I & I) study was completed for the Dayton and Wynooski Basins in 2015. Data has been recently gathered in the Springbrook and Hess Creek Basins.

## **STATE MANDATED FEATURES**

NA

## **CONTACT**

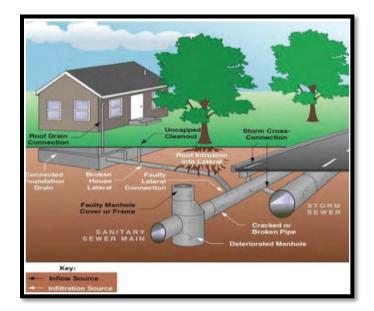


FIGURE 12 I&I ENTERING THE BASINS

## WASTEWATER PROJECT

Lift Station Short Term Improvements

This project includes minor improvements to Charles, Chehalem, Creekside, Fernwood, Highway 240, and Sheridan lift stations. Examples of the improvements include; adding safety grating to valve vaults, installing bollards for traffic protection, installing additional fencing to stations that don't have it, repainting of building doors, and replacing heaters and heat taping for freeze protection.

#### PROPOSED FUNDING

Wastewater rate revenue funds and 1% SDC funds.

## LOW PRIORITY PROJECT

The project will increase health and safety and reduce maintenance costs.

## **HISTORY OF THE PROJECT**

These identified improvements, and various others, were identified in the 2018 Wastewater Master Plan update.

## MANDATED FEATURES

NA

<u>CONTACT</u> engineering@newbergoregon.gov



FIGURE 13 FERNWOOD VALVE VAULT



FIGURE 14 CHARLES LS WITHOUT BOLLARDS

## WASTEWATER PROJECT

WWTP Hydraulic Improvements

Wastewater Treatment Plant (WWTP) Hydraulic Improvements are a group of projects to improve the hydraulic flow through the WWTP. They include modifications to the clarifier distribution box, the effluent weirs, and installation of a second (parallel) pipe from the clarifier effluent to the chlorine contact basin.

## PROPOSED FUNDING

Wastewater rate revenue along with 14% SDC funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. The projects will increase the efficiency of the treatment plant, reducing operational costs.

## **HISTORY OF THE PROJECT**

These improvements were identified in the 2018 Wastewater Master Plan update.

## MANDATED FEATURES

NA

<u>CONTACT</u> engineering@newbergoregon.gov



FIGURE 15 INSTALLATION OF A SECOND (PARALLEL) PIPE FROM THE CLARIFIER EFFLUENT TO THE CHLORINE CONTACT BASIN

## WASTEWATER PROJECT

Upper Portion of Hess Creek Trunk Line

Currently the access to Hess Creek is limited and undersized in some locations. This project will line the upper portion of the Hess Creek trunk line to reduce I/I influence and extend the life of the pipe. Flow monitoring will also be implemented after the lining to inform the design phase of Hess Creek Phase 2 project downstream.

## PROPOSED FUNDING

This project will be funded by the wastewater rate revenues and 2% SDC funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Lining the existing pipe will reduce the need for new pipe and disposing of the existing pipe. This project may also decrease the size of pipe needed downstream.

## **HISTORY OF THE PROJECT**

This project is C1.A in the 2018 Wastewater Master Plan update and is a priority project as it will reduce Inflow and Infiltration and may reduce the size of pipe needed downstream.

## MANDATED FEATURES

The work within Hess Creek may require state and local permits.

## **CONTACT**

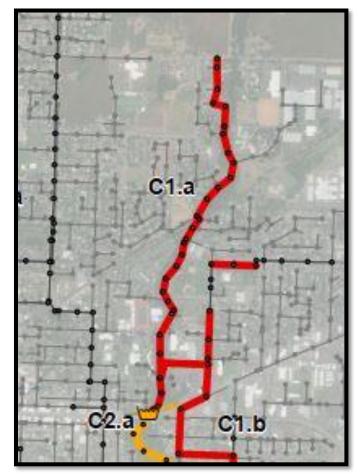


FIGURE 16 HESS CREEK TRUNK LINE

## WASTEWATER PROJECT

Parallel Line to Lower Portion of Hess Creek Trunk Line

The limits of this project are from E Fulton to the Wastewater Treatment Plant. This project will construct a gravity main line parallel to Hess Creek Canyon and reduce the flow going into the trunk line. The new lift station in the Phase 3 project will discharge to this new pipe.

## PROPOSED FUNDING

This project will be paid for by the wastewater rate revenues and 2% SDC funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. To relocate the pipe from Hess Creek will reduce Inflow & infiltration, reduce maintenance costs and impacts to Hess Creek.

## **HISTORY OF THE PROJECT**

This project is C1.b in the 2018 Wastewater Master Plan Update and is a priority project.

## **MANDATED FEATURES**

The work within Hess Creek may require state and local permits.

## **CONTACT**

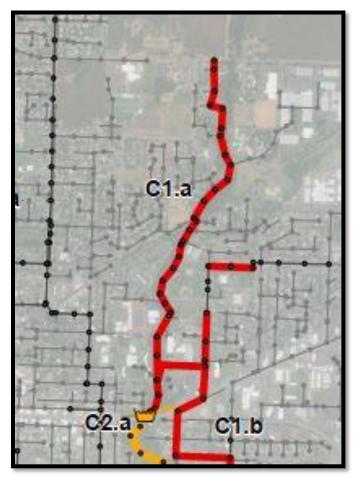


FIGURE 17 AREA OF E FULTON TO THE WASTEWATER TREATMENT PLANT

## WASTEWATER PROJECT

W Pinehurst Court Wastewater

This project (C1.d) will re-direct wastewater flow from W Pinehurst Court south to existing lines on W Creekside Court.

## PROPOSED FUNDING

This project will be funded by the wastewater rate revenues.

## LOW PRIORITY PROJECT

The project will increase health and safety, reduce maintenance costs and reduce the possibility of an overflow.

## **HISTORY OF THE PROJECT**

The 2018 Wastewater Master Plan identified this location as a possible overflow site due to the grade of W Pinehurst Court and the shallow wastewater line.

# C1 d C4.a .a C2 c/d

FIGURE 18 AREA OF W PINEHURST CT TO W CREEKSIDE CT

## **MANDATED FEATURES**

NA

## **CONTACT**

## WASTEWATER PROJECT

N Springbrook Trunk Line

This project will increase the capacity of the Springbrook Road line. This includes a parallel line and may be eliminated with other wastewater improvements.

## PROPOSED FUNDING

This project will be funded by the wastewater rate revenues and system development charges.

## MEDIUM PRIORITY PROJECT

The project will increase health and safety, reduce maintenance costs and reduce the possibility of an overflow.

## **HISTORY OF THE PROJECT**

The 2018 Wastewater Master Plan identified this location as a possible overflow site.

## **MANDATED FEATURES**

When the work occurs, the City will need to obtain a permit from the Oregon Department of Transportation.

## **CONTACT**

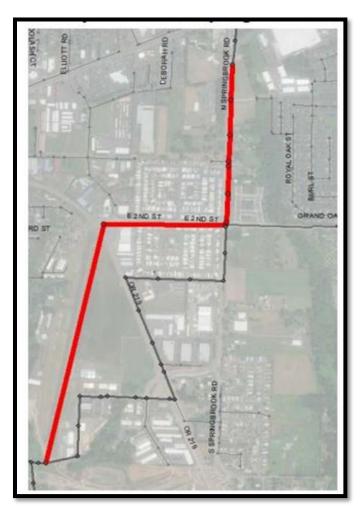


FIGURE 19 VICINITY MAP

## WASTEWATER PROJECT

**Riverfront Lift Station** 

This project will install a new lift station in the Riverfront area. This will serve the new development proposed and will allow for two smaller lift stations to be decommissioned.

## PROPOSED FUNDING

This project will be funded by the wastewater rate revenues and system development charges.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. The projects will reduce operational costs.

## HISTORY OF THE PROJECT

Future infrastructure in the Riverfront area will be necessary to service developments predicted in the next 20 years. In addition to serving future development, this infrastructure could allow for the displacement of Andrew and Charles Lift Stations. Additional gravity pipelines with approximate alignments shown in Figure 19 could transport Andrew and Charles Lift Station flows to the new, regional Riverfront Lift Station.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> engineering@newbergoregon.gov

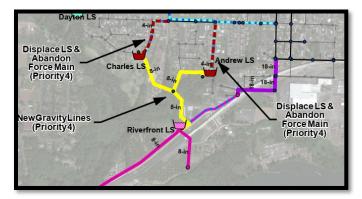


FIGURE 20 VICINITY MAP

## 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, pump stations, and water distribution system.

The following project list was developed from the 2017 Water Master Plan and other associated studies while considering the available funds from the water utility rates and system development charges. A new project shown as a new groundwater treatment plant will be a main component of the five year plan along with the HB2001 projects. The redundant water supply project will move forward with geotechnical evaluations and engineering work related to a new water intake.

WATER PROJECTS	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27
Redundant Water Supply	\$ 579,563	\$ 3,198,018	\$ -	\$ -	\$ -	\$ -
Bell West Pump Station - Zone 2 constant pressure	\$ 170,000	\$ 1,051,000	\$ -	\$ -	\$ -	\$ -
Upsize existing mains and construct new distribution loop	\$ 232,000	\$ 258,750	\$ -	\$ 110,872	\$ 286,881	\$ -
NE Zimri Drive Zone 3 distribution backbone within UGB	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
N College Street - N Terrace Street - proposed Bell West P.	\$ 30,000	\$ 720,000	\$ -	\$ -	\$ -	\$ -
Routine Main Replacement Program	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -
North non-potable water line and Otis Springs pumping in	\$ -	\$ 103,500	\$ 374,929	\$ -	\$ -	\$ -
Fixed Base Radio Read	\$ 365,790	\$ 207,000	\$ -	\$ -	\$ -	\$ -
Decommission Well #1	\$ -	\$ 103,500	\$ -	\$ -	\$ -	\$ -
WTP Filter Covers	\$ 188,000	\$ -	\$ -	\$ -	\$ -	\$ -
Nvalley Reservoir Driveway	\$ -	\$ 239,970	\$ -	\$ -	\$ -	\$ -
Emergency Connection & Controls at WTP	\$ -	\$ 582,451	\$ -	\$ -	\$ -	\$ -
Seismic Improvements at Water Reservoirs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 730,352
Seismic Improvements - Waterline Replace	\$ 168,826	\$ 179,977	\$ 191,865	\$ -	\$ 218,047	\$ -
HB 2001 Waterline - Main, 4th, Lincoln & 5th	\$ -	\$ 239,970	\$ 365,822	\$ -	\$ -	\$ -
HB 2001 Waterline - Blaine St	\$ -	\$ -	\$ -	\$ -	\$ 1,180,362	\$ -
HB 2001 Waterline - Meridian	\$ -	\$ -	\$ -	\$ -	\$ 639,605	\$ -
HB 2001 Waterline - 7th, Pacific, 9th & Paradise	\$ -	\$ -	\$ 319,775	\$ 545,433	\$ 581,459	\$ -
HB 2001 Waterline - River	\$ 281,377	\$ 441,544	\$ -	\$ -	\$ -	\$ -
HB 2001 Waterline - 5th	\$ 166,575	\$ -	\$ -	\$ -	\$ -	\$ -
HB 2001 Waterline - 11th & Boston Square	\$ 55,150	\$ -	\$ -	\$ -	\$ -	\$ 1,336,752
HB 2001 Waterline - Vermillion	\$ 12,381	\$ -	\$ -	\$ -	\$ -	\$ -
AWIA	\$ 50,000	\$ -	\$ -	\$ -	\$ 229,505	\$ -
GWTP New	\$ -	\$ 517,500	\$ 1,874,644	\$ 5,820,769	\$ 5,163,854	\$ -
TOTAL WATER PROJECTS	\$ 2,549,663	\$ 7,843,179	\$ 3,127,034	\$ 6,477,074	\$ 8,299,712	\$ 2,067,104

## WATER PROJECT

**Bell West Pump Station** 

The proposed pump station is needed to supply adequate fire flow and constant service pressure to the Zone 2 expansion area. Once the Bell Road Reservoir is constructed, this pump station will be used to supply a future reservoir.

Additionally, this project extends waterlines from N Terrace Drive to the intersection of N College and NE Valley Road and then to the east down NE Bell Road. This will help supply water for future Zone 2 development.

## PROPOSED FUNDING

This project will be funded for out of water rate revenues and system development charge funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs

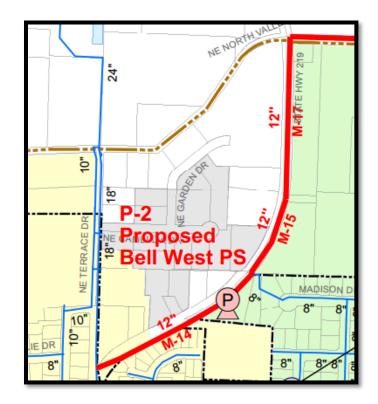
## HISTORY OF THE PROJECT

The Oak Knoll Water Booster Pump Station at 3613 N Ivy Drive was installed in 2000 to provide a constant water pressure (Pressure Zone 2) to serve 42 homes along Knoll Drive at the city's northern water service area. Since then, 16 homes along W Madison Drive, and Veritas School, were added and served by the city's potable water system. Any additional connections to this system could impact the operation of the existing Oak Knoll Booster Pump Station.

## **MANDATED FEATURES**

NA

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## WATER PROJECT

Decommission Wells #1 and #2

This project would properly decommission the wells that are no longer being used per state standards.

## PROPOSED FUNDING

This will be paid for out of water rate and system development charge funds.

## MEDIUM PRIORITY PROJECT

This is a regulatory requirement that must be completed by the City.

## HISTORY OF THE PROJECT

Wells #1 & #2 have reached the end of life and are not being utilized.

## MANDATED FEATURES

This is regulated by OAR 690-220-0030.

## **CONTACT**

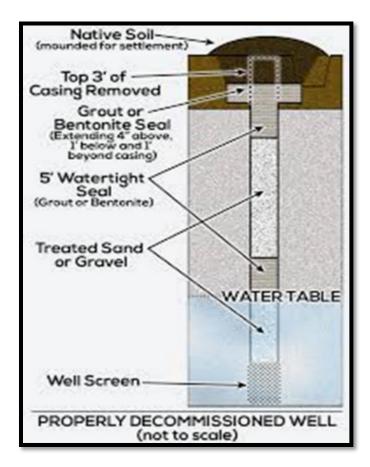




FIGURE 21 DECOMMISSION WELLS 1 & 2

## WATER PROJECT

**Downtown Fire Flow Project** 

This project is to replace several non-looped sections of 1 and 2 inch diameter water mains along Hancock Street through downtown Newberg.

#### PROPOSED FUNDING

This project will be paid for out of water rate revenues and system development charge funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will increase health and safety.

#### **HISTORY OF THE PROJECT**

Fire flow deficiencies occur in this area and the project will also improve fire hydrant spacing and coverage. This project will coordinate with the adopted 2016 Downtown Improvement Plan.

#### MANDATED FEATURES

NA

#### CONTACT

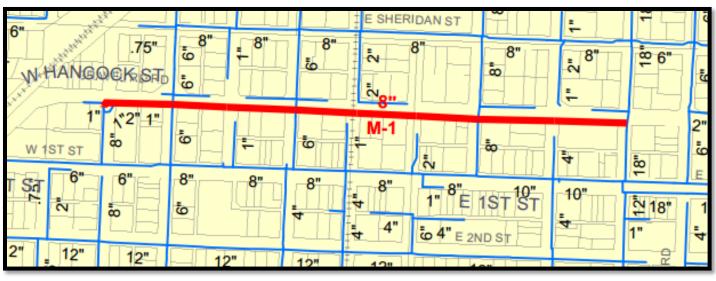


FIGURE 22 REPLACING DEFICIENT PIPE AND INADEQUATE FIRE HYDRANTS ON HANCOCK STREET

## WATER PROJECT Fixed Based Radio Read

Advanced metering infrastructure (AMI) is an integrated system of smart meters, communications networks, and data management systems that enables two-way communication between utilities and customers. The project will consist of the installation of two lattice towers, the RNI/Customer portal and the replacement of meters and meter boxes.

## PROPOSED FUNDING

This project will be paid for out of water rate and SDC funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, and inclusion as priorities for Newberg. Along with responding to council goals the project will:

- Increase health and safety
- Reduce costs

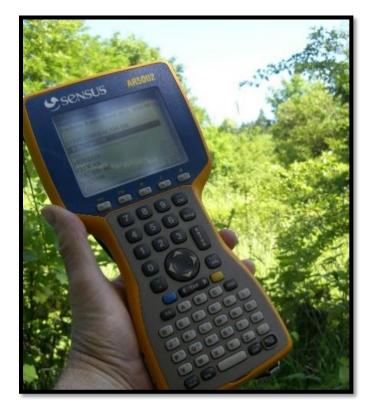
## HISTORY OF THE PROJECT

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 utility billing office in real time. This will cut down on labor costs and could detect a leak sooner. Rate payers will also have the ability to gain access to hourly real-time and historical water use information. Operations and treatment plant staff will have access to real time data.

## MANDATED FEATURES

NA

CONTACT kaaren.hofmann@newbergoregon.gov



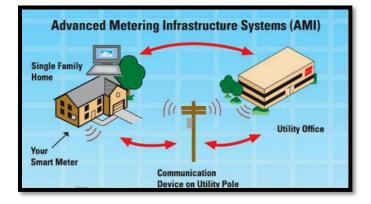


FIGURE 23 READING METERS CURRENTLY (TOP) VS ADVANCED WATER METERING READING INFRASTRUCTURE SYSTEM (BOTTOM)

## WATER PROJECT

**Redundant Supply** 

The City's current water supply is the well field on the south side of the Willamette River. To address supply vulnerability and long-term water resiliency, per the 2017 Water System Master Plan, the City should pursue another source north of the Willamette River. This project would include water rights, exploration, property acquisition and potentially the construction of a secondary treatment plant.

Phase 1 & 2 of the project are completed. Phase 3 is underway.

## PROPOSED FUNDING

This will be paid for out of water rate revenues and SDC funds.

## **HIGH PRIORITY PROJECT**

Providing for a Safe and Reliable Water System for our citizens is a necessary function of the City. Development of an additional water supply and a seismically resilient system focuses on customer service and sustainability of one of our most valuable resources. Along with responding to Council goals the project will:

• Increase health and safety

## **HISTORY OF THE PROJECT**

The City's 2017 Water Master Plan notes that the City's water supply source is vulnerable to flooding, ground movement, seismic activity or other natural disasters. If something was to occur to that source, the City would be unable to provide water to its residents.

## **MANDATED FEATURES**

NA

<u>CONTACT</u> kaaren.hofmann@newbergoregon.gov





FIGURE 24 EXPLORING FUTURE WATER SUPPLY

## WATER PROJECT

Fire Flow - Various

There are several more fire flow upgrades projects noted in the 2017 Water Master Plan. The priorities will be decided based on other projects and opportunities.

#### **PROPOSED FUNDING**

These projects will be funded by the SDC and water rate funds.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will increase health and safety.

## **HISTORY OF THE PROJECT**

The 2017 Water Master Plan identified several locations that need to be upgraded to provide increased fire flows.

## **MANDATED FEATURES**

NA

#### **CONTACT**

engineering@newbergoregon.gov





FIGURE 25 FIRE FLOW UPGRADES

## WATER PROJECT

North Valley Reservoir Driveway

The access to the North Valley Reservoirs is currently gravel and has drainage issues. This project would correct the drainage issues and pave the access to allow the City to access this important asset in all-weather situations.

## PROPOSED FUNDING

This project will be funded by water rate revenues.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs

## **HISTORY OF THE PROJECT**

The existing access is gravel with an undersized culvert. The City is responsible for maintenance of this access.

## **MANDATED FEATURES**

NA

## **CONTACT**



FIGURE 26 NORTH VALLEY RESERVOIR ACCESS ROAD

## WATER PROJECT

Routine Water Main Replacement

As existing pipes age and reach the end of life, they need to be replaced. It is better to replace pipes on a routine basis than as an emergency repair. This project also includes the replacement of water pipes to be more resilient in a natural disaster.

## PROPOSED FUNDING

This project will be funded by water rate revenues.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Replacing pipes on a routine basis is better for the residents and the environment. Along with responding to Council goals the project will:

- Increase health and safety
- Reduce costs
- Coordinates with larger planned projects

## HISTORY OF THE PROJECT

The 2017 Water Master Plan identified water lines that were near the end of life and need to be replaced. Additionally, the seismic plan indicated that the critical water pipes be replaced to become more resilient. Staff is coordinating these projects with other utility and transportation projects.

## STATE MANDATED FEATURES

The seismic resilience study was guided by the Oregon Resilience Plan and meets relevant requirements of OAR Chapter 333, Division 061-0060(5)(a)(J). This information is being incorporated into the technical update of the Water Master Plan.

## **CONTACT**

engineering@newbergoregon.gov

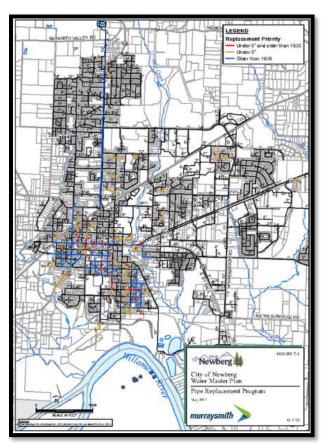


FIGURE 27 CITY WATER SERVICE



## WATER PROJECT

New Ground Water Treatment Plant

Our existing ground water treatment plant was originally constructed in 1953 and it was expanded and upgraded in 1961, 1970, 1980, 1997 and 2006. The current plant is vulnerable to damage in a seismic event and there is a need to cover the treatment plant filters to meet State requirements for airborne contamination of treated water. Instead of spending over \$8,000,000 for these improvements, it has been determined that it makes more fiscal sense to construct a new ground water treatment plant to meet the City's needs.

## PROPOSED FUNDING

This project will be funded by water rate revenues and will need to be financed for a portion of the work.

## **HIGH PRIORITY PROJECT**

This is a regulatory requirement.

## **HISTORY OF THE PROJECT**

This was determined after more investigation into constructing the required seismic improvements and the required covers.

## **MANDATED FEATURES**

All will be mandated by the State.

## **CONTACT**

kaaren.hofmann@newbergoregon.gov





## WATER PROJECT

## American Water Infrastructure Act

The America's Water Infrastructure Act of 2018 requires community water systems that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan. The City's first assessment and response plan was completed in 2021. This is required to be reviewed every five years.

#### PROPOSED FUNDING

Water rate revenues.

#### **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will increase health and safety and complies with a federal and state mandate.

#### **HISTORY OF THE PROJECT**

This is a requirement from the Environmental Protection Agency. This assessment and plan is a replacement of the existing Water Vulnerability Study that was completed in the early 2000s.

#### **MANDATED FEATURES**

NA

#### CONTACT



## WATER PROJECT

**Emergency Connection & Controls** 

This project will implement needed improvements to the water system to meet the Oregon Resilience Plan and City of Newberg Level of Service Goals. As identified in the vulnerability assessment, the Waste Treatment Plant poses several risks if a Cascadia Subduction Zone earthquake occurs. By adding a point for emergency cross-connection and installing hydraulic control valves, the plant could be isolated during an earthquake event, allowing raw water to continue into the distribution system.

## PROPOSED FUNDING

Water rate revenues.

#### **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will increase health and safety and complies with a federal and state mandate.

#### **HISTORY OF THE PROJECT**

In support of the 2017 Water Master Plan and Oregon Health Authority (OHA) guidelines, the City conducted a water system Seismic Resilience Assessment (SRA).

## **MANDATED FEATURES**

Compliance with the Oregon Resilience Plan.

## **CONTACT**

engineering@newbergoregon.gov

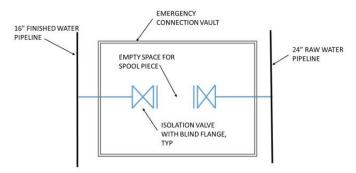


Figure 1. Raw Water Emergency Connection Vault

## WATER PROJECT

**Reservoirs Seismic Improvements** 

This project will implement needed improvements to the water system to meet the Oregon Resilience Plan and City of Newberg Level of Service Goals for the water reservoirs. By adding hydraulic control valves and replacing a portion of the pipe at North Valley Reservoirs, water storage at the tanks could be preserved.

## PROPOSED FUNDING

Water rate revenues.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability as a priority for Newberg. Along with responding to Council goals the project will increase health and safety and complies with a federal and state mandate.

## **HISTORY OF THE PROJECT**

In support of the 2017 Water Master Plan and Oregon Health Authority (OHA) guidelines, the City conducted a water system Seismic Resilience Assessment (SRA).

## **MANDATED FEATURES**

Compliance with the Oregon Resilience Plan.

## **CONTACT**





Figure 3.6 – Former Chlorination Building

## WATER PROJECT

## HB2001 Improvements

This project will implement needed improvements to the water system to comply with HB 2001; Middle Housing requirements. This project will upsize several pipes in the area south of downtown Newberg.

## PROPOSED FUNDING

Water rate revenues.

## **HIGH PRIORITY PROJECT**

The Council has identified increased sustainability and improved diversity, equity, inclusion, and housing as priorities for Newberg.

## **HISTORY OF THE PROJECT**

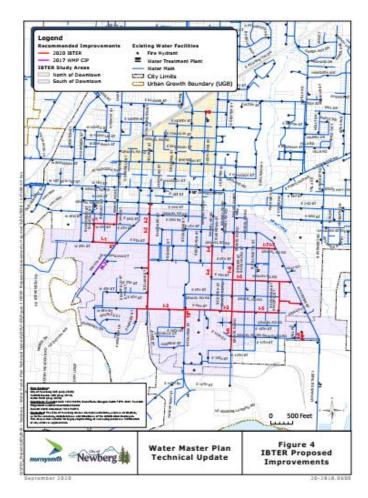
In the evaluation of providing for middle housing it was determined that several of the water pipes in the area south of downtown are not adequate to provide the required fire flow.

## **MANDATED FEATURES**

NA

## **CONTACT**

engineering@newbergoregon.gov



Recommended Improvements

Project No.	Project Description	Estimated Project Cost <sup>14</sup>
1-1	Install 1,733 LF of 8-inch DI Pipe in S Main Street, W 4th Street, S Lincoln Street, and W 5th Street	\$486,000
1-2	Install 2,558 LF of 12-inch DI Pipe in S Blaine Street	\$812,000
1-3	Install 2,962 LF of 8- and 12-inch DI Pipe in E 9th Street, Charles Street, and S College Street	\$1,756,000
н	Install 772 LF of 8- and 12-inch DI Pipe in S Meridian Street	\$440,000
1-5	Install 3,691 LF of 12-inch DI Pipe in E 7th Street, S Pacific Street, E 9th Street, and Paradise Drive	\$1,167,000
H6	Install 2,736 LF of 12-inch DI Pipe in S River Street	\$868,000
1-7	Install 453 LF of 12-inch DI Pipe in E 5th Street	\$148,000
18	Install 159 LF of 8-inch DI Pipe from E 11th Street to the Boston Square Apartments	\$49,000
1-9	Install 15 LF of 8-inch DI Pipe in Vermillion Street	\$11,000
	Total Co	ast \$5,737,000

## WATER PROJECT

**Otis Springs Improvements** 

This project will construct the necessary improvements to Otis Springs to allow for this resource to be used in the Non-Potable Water System. New pumps must be installed in order to meet the desired flow rates and standard pressures of 30-90 psi. Larger tank size is required in order to successfully fill and drain under the 9 hour irrigation period each day.

## PROPOSED FUNDING

Water rate revenues.

## PRIORITY PROJECT

The Council has identified increased sustainability as a priority for Newberg.

## **HISTORY OF THE PROJECT**

This project is in the 2017 Water Master Plan as an integral part of the Non-Potable Water System. The existing Otis Springs infrastructure and non-potable supply is not adequate for the City's proposed developments shown in Option B of the 'Water Master Plan May 2017'.

## MANDATED FEATURES

NA

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