

List of Significant Projects

The List of Significant Projects includes significant projects necessary to support the land uses designated in the Comprehensive Plan. This list is subset of projects included in the Citywide System Plan's Investment Strategy.

Sanitary Sewer and Stormwater Management

The list of significant projects for sanitary sewer and stormwater management is based on existing system plans and includes treatment plant upgrades for capacity and regulatory compliance; pipe capacity projects by sanitary and combined sewer basins; a sanitary sewer extension program; watershed programs to improve stormwater management; and a stormwater program area to address system connectivity and water quality.

Water

The list of significant projects for water is based on system plans and includes projects and programs to address supply, storage, transmission and distribution needs to ensure short and long-term provision of clean water and compliance with drinking water regulations.

Transportation

The transportation list of significant projects includes multi-modal projects to address the needs of pedestrians, bicyclists, transit users, freight, and motorists. Investments in the City's transportation system are needed to maintain existing facilities and to ensure the system meets the needs of Portlanders for decades to come.

LIST OF SIGNIFICANT PROJECTS

Sanitary and Combined Sewer

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
SS-1	CBWTP Improvements	Program includes mid-size improvements at the Columbia Boulevard Wastewater Treatment Plant such as: seismic improvements, outfall diffuser extension, access / egress improvements, bio-solids dryer, dewatered sludge hopper, TWAS piping upgrade, centrifuge. Includes expansion to secondary treatment, if required. All are consistent with the Facilities Plan and the Conditional Use Master Plan.	Columbia Blvd Wastewater Treatment Plant	\$171,808,000
SS-2	TCWTP Improvements	Improvements identified in the facilities plan. Anticipated projects include property acquisition, new headworks/screenhouse, upgrades to the primary clarifier, and construction of an additional secondary clarifier.	Tryon Creek Wastewater Treatment Plant, Lake Oswego	\$55,926,000
SS-3	Pump Station Improvement Program	Program to refurbish or upgrade pump stations not in compliance with current codes, not operating reliably, need improvement due to growth in the receiving basin, and/or over 20 years old with out-of-date equipment. The Pump Station Improvement Plan guides project selection. Program will also address the 57 miles of force mains.	Citywide	\$132,901,000
SS-4	Holladay/Stark/Sullivan - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Spans NE Broadway, narrowly to 24th; N to Fremont; S to Stark. S of I-84, extends to I-205	\$34,700,000
SS-5	Beech/Essex - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Willamette River east to Grand between Knott and Alberta	\$18,500,000
SS-6	Oak - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Willamette River to NE 24th, between Irving and Stark	\$22,600,000
SS-7	Taggart/Insley - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Willamette River to NE 60th between Stark and the south city limit.	\$60,800,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2013-2033)
SS-8	Wheeler - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Willamette River, Grand, Prescott, 24th, Hancock.	\$10,300,000
SS-9	Lloyd District - capacity upgrades	Based on Systems Plan and redevelopment activity, adds capacity by creating a separated stormwater system and/or upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Includes high priority pipe rehabilitation if located in project area.	Lloyd District	\$18,500,000
SS-10	Alder - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Includes high priority pipe rehabilitation if located in project area.	Willamette River to SE 42nd bw Stark & Hawthorne; inc. Ladds Addition.	\$41,000,000
SS-11	NE 13th Ave Basin - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	Vancouver, Columbia Blvd, NE 42nd, Prescott	\$17,400,000
SS-12	Northwest Neighborhoods - capacity upgrades	Based on Systems Plan, program adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	NW including hills to ridgeline, excluding downtown	\$41,000,000
SS-13	North Portland - capacity upgrades	Based on Systems Plan, adds capacity by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work includes high priority pipe rehabilitation if located in project area.	West of Peninsular Ave.	\$5,000,000
SS-14	Sanitary Sewer Collection System Capacity (Infiltration & Inflow)	Series of projects to address infiltration and inflow in the sanitary sewer system in SW Portland. Projects typically involve rehabilitation of main lines and laterals and disconnecting storm inlets from the sanitary sewer.	SW	\$56,340,000
n/a	Sewer Capacity Upgrades	Based on Systems Plan, adds capacity in small combined sewer system areas not addressed by specific basin projects, by upsizing pipes and/or adding surface infiltration facilities. Projects prioritized based on risk and benefit/cost. Work may include high priority pipe rehabilitation.	Various	\$50,000,000
n/a	Sewer Extensions	Sewer extensions to relieve septic systems at risk of failure, correct party sewer situations, and provide service where development will be occurring soon and service is not available.	Various	83,462,000

LIST OF SIGNIFICANT PROJECTS

Stormwater Management

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2013-2033)
SM-1	Johnson Creek Willing Seller Ph. 2	Based on the Johnson Creek Restoration Plan, acquisition of land in four target areas for floodplain restoration. Properties are purchased at fair market value and used to implement restoration projects detailed in other capital projects on list.	Johnson Creek Target Areas	10,000,000
SM-2	West Lents Flood Mitigation	Based on the Johnson Creek Restoration Plan, restore floodplain and wetland function in the West Lents target area for flood storage and water quality, stabilize stream banks to protect nearby homes, businesses and downstream sewer infrastructure, and restore habitat. Projects address TMDL requirements, ESA plans and other regulations.	West Lents target area	6,417,000
SM-3	East Lents Area Flood projects	Based on the Johnson Creek Restoration Plan, restore floodplain and wetland function in the East Lents target area for flood storage and water quality, stabilize stream banks to protect nearby homes, businesses and downstream sewer infrastructure, and restore habitat. Projects address TMDL requirements, ESA plans and other regulations.	East Lents target area	8,240,000
SM-4	Other Johnson Creek Target Area Floodplain Projects	Based on the Johnson Creek Restoration Plan, restore floodplain and wetland function in the Tideman Johnson and Powell Butte target areas, and smaller floodplain restoration in partnership with creek-side property owners in other targeted areas, for flood storage and water quality, stabilize stream banks to protect nearby homes, businesses and downstream sewer infrastructure, and restore habitat. Projects address TMDL requirements, ESA plans and other regulations.	Tideman and Powell Butte Target areas plus CRP	5,045,000
SM-5	Johnson Creek Restoration Program Projects	Priority projects along the main stem and tributaries of Johnson Creek to mitigate flooding, improve water quality and wildlife habitat, address stormwater outfalls and culverts, and sanitary sewer protection. Includes restoration of floodplain and wetlands, construction of stream enhancements, and partnership projects with other agencies to meet the objectives of the 2001 Johnson Creek Restoration Plan. Projects address TMDL requirements, ESA plans and other regulations.	Johnson Creek Watershed, various	9,025,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2013-2033)
SM-6	Columbia Slough Outfalls	Design and construction of pollution control facilities for separated stormwater areas flowing through 220-city owned outfalls to the Columbia Slough to address DEQ Sediment Order. Program prioritizes outfalls draining Columbia Boulevard and other high traffic City roadways.	Columbia Boulevard area	14,250,000
SM-7	Columbia Slough Restoration Projects	Culvert replacement, water quality facilities and wetland and habitat restoration and enhancement to improve water quality, habitat and hydrology. Projects address TMDL requirements, infrastructure deficiencies, ESA plans and other regulations and may include partnership with other agencies. Includes in-stream restoration as well as stormwater system improvements.	Columbia Slough Watershed, various	11,121,000
SM-8	Fanno Creek Stormwater System Improvements	Projects to address TMDLs, recommended by the Fanno/Tryon TMDL predesign. 1-5 year projects include stormwater retrofits along the Beaverton-Hillsdale Highway, addressing deficient stormwater outfalls, and other stormwater system improvements.	Fanno Watershed: Beaverton-Hillsdale corridor and various	2,700,000
SM-9	Tryon Creek Stormwater System Improvements	Projects to address TMDLs, recommended by the Fanno/Tryon TMDL predesign. 1-5 year projects include stormwater retrofits along the I-5 and Barbur Blvd. corridors, addressing deficient stormwater outfalls, and other stormwater system improvements.	Tryon Watershed: I-5/Barbur area, and various	2,675,000
SM-10	Fanno/Tryon Drainage Shoulder Improvements	Drainage improvements for high priority City maintained roadside ditches along arterial streets in the Fanno and Tryon watersheds. Projects address water quality, as recommended by the Fanno/Tryon TMDL predesign. Includes SW Hamilton and SW Stephenson and future projects.	Fanno and Tryon Creeks watersheds (various)	5,401,000
SM-11	Fanno/Tryon Restoration Projects	In-stream restoration and improvements to address water quality, hydrology and habitat, including TMDL requirements, ESA plans and other regulations. Includes culvert replacement, stream daylighting, sanitary sewer protection and other restoration in both the Fanno and Tryon creek watersheds. Projects recommended by the Fanno/Tryon TMDL predesign and watershed plans.	Fanno and Tryon Creeks watersheds, various	7,557,000
SM-12	Willamette River Restoration Projects	Projects to improve water quality, habitat and hydrology along the main stem river and tributaries (subwatersheds) to address TMDL requirements, ESA plans and other regulations. Includes in-stream and floodplain restoration and enhancement.	Willamette River Watershed	17,600,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2013-2033)
SM-13	Stephens Creek Stormwater System Improvements	Address stormwater issues in the Stephens Creek subwatershed, including unmanaged stormwater discharge, pollution reduction and detention facilities, restoration of riparian and wetland functions, erosion and sediment loading at outfalls.	Stephens Creek Subwatershed	14,323,000
n/a	Stormwater Management Program Implementation	Improvements to the stormwater management system beginning with the Stephens Creek subwatershed. Other areas of particular concern include elsewhere in SW, outer east, and the Columbia Slough. Specific improvements have not been identified.	Various	56,300,000
n/a	Culvert Replacement Program	Replace or improve stream culverts citywide to improve fish passage and water quality, and address flooding and maintenance needs. Includes completion of culvert replacements on Crystal Springs Creek and other priority projects to address ESA plans and other system needs.	Various/ Citywide	14,302,000
n/a	Watershed Land Acquisition Ph. 1 & 2	Program targets acquisition of medium to high functioning natural resource lands in support of watershed health and stormwater management.	Various/ Citywide	16,000,000

Flood Management

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2013-2033)
FM-1	Columbia River Levee Improvement Project	Identify and implement necessary improvements to the levees within the Multnomah County No 1, Peninsula No 2, and Peninsula No 2 Drainage Districts, so that they are certified as being protective of a 1% chance flood.	MCDD No 1, Peninsula No 1 and No 2 Drainage Districts	100,000,000 – 200,000,000

LIST OF SIGNIFICANT PROJECTS

Water

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
n/a	Dodge Park	Improvements will continue to address security and visitor amenities at the site, trespass/hazard warning signs, alternative park management arrangements, and visitor management. The bureau is committed to improving the maintenance of the park including preservation of existing infrastructure, repairs, replacements and upgrades. New uses for the park include an amphitheater, camping, training area, facility upgrade to the existing building, and special needs assistance for using the park amenities.	Dodge Park	1,200,000
W-1	Emergency Coordination Center	This project designs and constructs the City's Emergency Coordination Center. The bureau will locate its emergency response and security staff at the location. The project location is adjacent to the City's 911 Call Center at SE 99th Ave and Powell Blvd. The total project cost is \$19.85M and PWB is a contributing bureau.	Emergency Coordination Center (SE 99 th and Powell)	1,807,000
W-2	Bertha Service Area Improvements	This project will connect the Bertha 962 pressure zone with the 937 pressure zone with new 8-inch and 4-inch main and a new regulator. This work will allow for the abandonment of the existing main that passes through steep, unimproved right-of-way while maintaining an adequate level of service to the Bertha Service Area.	Bertha Service Area	856,000
W-3	Burnside Pump Station Replacement	This project will decommission the old undersized pump station and modify the nearby Verde Vista pump station to serve the Burnside pumping needs for the next 50 years. The project will also acquire property for the future Burnside pump station to be built 50 years from now.	Burnside Pump Station	2,000,000
W-4	Carolina Pump Main Extension, Phase II	This project will connect the existing Carolina Pump Main (Westwood Tanks) and the Fulton Pump Main (Burlingame Tanks) together. This will be a pump main from the intersection of SW Capitol Hwy and SW Terwilliger Blvd to the Burlingame Tank site.	SW Capitol Hwy – SW Terwilliger	3,184,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
n/a	Distribution Mains	This program includes rehabilitation and replacement of substandard mains, expansion due to applications from private developers, increasing supply for fire protection, improving water quality and water system upgrades due to local improvement districts (LIDs), and street improvements. Main replacements also include appurtenances (e.g. fire hydrants, valves, pressure regulators, service branches, and other facilities).	Various/Citywide	300,738,000
W-5	Division Street Piping	This project will design and construct improvements located in the ROW for the Tabor Reservoir Adjustments project. Improvements will be made to the distribution and transmission systems as well as to Conduits 2 and 3 in SE Division St.	SE Division St	1,680,000
W-6	Forest Park Low Tank	This project will plan, design and construct a single 1.3 million gallon AWWA D110 type 1 tank. This storage is to augment regular system capacity and increase fire flow.	Forest Park Low Tank	2,210,000
n/a	Fountains	The bureau has responsibility for 27 decorative fountains, including repairs, replacements and upgrades. Funding includes provisions for repair of drain lines and valves, replacement of liners, repair and replacement of electrical equipment and lighting systems, repair and replacement of pumps, addition of telemetry, and various improvements to exterior surfaces.	Various/Citywide	3,000,000
W-7	Fulton Pump Station	This project will replace the Fulton Pump Station with a new pump station located in Willamette Park.	Fulton Pump Station	9,060,000
W-8	Greenleaf Pump Station	This project will plan, design and construct a replacement Greenleaf pump station at the existing site. Flow upgrades will remove the Penridge tank from the system. The new pump station will pump directly to the distribution system.	Greenleaf Pump Station	3,500,000
n/a	Hydrants	This project provides for the replacement of fire hydrants that are no longer repairable. Replacements may also occur as part of the bureau's ongoing efforts to standardize hydrant types for more efficient and effective management of maintenance and repair activities.	Various/Citywide	23,900,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
W-9	Interstate Facility Renovation	This project consists of comprehensive reconstruction and improvements to the bureau's System Control Center and Operations and Maintenance Facility, located on North Interstate Avenue, to address seismic and other site vulnerabilities and bring the facility up to current safety and building codes.	Interstate Facility (NE Interstate)	35,323,812
W-10	Portland-Milwaukie Light Rail Project	This project consists of planning, design and construction for relocation of over 5,000 feet of main required for the Portland-Milwaukie Light Rail project. PWB Construction crews and Construction Management Team will assist during the construction phase of the project.	PMLR alignment, SW/SE	1,100,000
n/a	Meters	This project funds the purchase and installation of water meters. The Bureau objective is to maintain meter accuracy to within 3% of actual values.	Various/Citywide	35,690,000
n/a	Pump Stations and Tanks	This program maintains a large variety of infrastructure consisting of water storage tanks, pumps, and pump and control facilities. The bureau uses a reliability centered maintenance (RCM) analysis to prioritize projects in these areas. A key focus of the next five years will be to replace the remote telemetry units at over 140 remote sites. The existing units are over 15 years old, and are becoming obsolete. The servers are at the end of their service cycle, and must also be replaced.	Various/Citywide	20,003,000
W-11	Rose City Sewer Rehabilitation	The project will install new 1207 feet of 8 inch DI, 2 hydrants and 39 services 2 inches or smaller.	Rose City area	2,000
W-12	Raymond Tank Supply Improvements	This project will design and construct improvements at Raymond Tank Site and at an intersection of SE Holgate Boulevard and SE 136th.	Raymond Tank, vicinity	535,000
W-13	Sam Jackson Pump Station	This project will add multiple capital improvements including seismic improvements, replacement of RTU and motor controllers, installation of pump control and check valves, extension of the crane rail, a concrete pad, and installation of a security fence and gate.	Sam Jackson Pump Station	1,400,000
n/a	Services	This project constructs replacement and customer requested water services. A water service is the connection between the water main and any given customer's service meter. Service connections are always performed by Water Bureau crews directed by a certified Water Service Mechanic. An ongoing budget of approximately \$4 million per fiscal year provides for installation of about 1,000 water service connections annually and other upgrades to existing water services.	Various/Citywide	80,000,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
W-14	Willamette River Pipe Crossings	The project replaces major pipelines to strengthen the transmission link between Powell Butte and the service areas west of the Willamette River, including downtown and the storage reservoirs at Washington Park. It includes construction of a new seismically strengthened river crossing to replace the first one of potentially two Willamette River crossings, and new transmission piping on both sides of the river.	Various, Powell Butte – Washington Park	111,600,000
n/a	Water Quality and Regulatory Compliance	The bureau recognizes the Bull Run watershed as a diverse ecosystem. The bureau is committed to preserving this habitat and complying with federal regulations using practical, locally driven solutions. Many of the projects in this subprogram respond to the Endangered Species Act (ESA), including the implementation of the Bull Run Habitat Conservation Plan (HCP) as adopted by City Council and approved by the National Marine Fisheries Service. Consistent with HCP commitments, this program funds easements, purchases land, and also supports projects jointly conducted with other watershed partners.	Bull Run	48,596,000
n/a	Bull Run Watershed	The bureau is committed to updating the Bull Run watershed protection and maintenance procedures and agreements based on the 2007 Bull Run Agreement with the Mt. Hood National Forest. The function of this program is to allocate funds for the capital projects necessary to maintain, improve, and protect the watershed facilities that are not directly related to the water supply system facilities. This includes Bull Run Watershed road reconstruction to ensure continuous, reliable, and safe access to all facilities, as well as maintenance of other city-owned infrastructure within the watershed.	Bull Run	38,410,000
n/a	Dams and Headworks Repair and Rehabilitation	This program provides for assessment of the condition and rehabilitation of dams and other facilities at Headworks. As many of these facilities are between 50 and 70 years old, their safe and reliable operation requires ongoing investment. The program includes preliminary engineering and design of needed repairs, rehabilitation of these facilities, and actual repair work.	Bull Run	3,000,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
W-15	Groundwater Improvements	The Columbia South Shore Wellfield (CSSW) is Portland's alternative supply of water should the Bull Run watershed supply be interrupted for any reason. Projects improve the maintenance of this aging infrastructure, including repairs, selective replacements and upgrades.	CSSW	9,700,000
W-16	Groundwater Collection Main Hardening	Much of the piping connecting the wells to the Groundwater Pump Station is located in liquefiable soils which are vulnerable during a seismic event. This project would design and install measures to "harden" the piping and reduce this vulnerability.	CSSW	20,000,000
W-17	Groundwater Electrical Supply Improvements	This project designs and constructs a new 115kV/4160V transformer and other components to complete a double-ended electrical substation at the Groundwater Pump Station. It will also design and construct a 5kV main breaker replacement and purchase selected spare components.	CSSW	2,071,000
W-18	Groundwater Pump Station Expansion	As water demand increases, the bureau will need to increase the available flows from the groundwater system. The system expansion will include upgrade of the Groundwater Pump Station to provide additional capacity.	CSSW	10,000,000
W-19	Groundwater Wellfield Expansion	As water demand increases, the bureau will need to increase the available flows from the groundwater system. The system expansion will include additional well development and collection mains in the Columbia South Shore area.	CSSW	12,000,000
W-20	Groundwater Wellfield Reliability Enhancements	The bureau is attempting to increase flexibility and preparedness to meet the challenge of an interruption of Bull Run water. It is evaluating electrical vulnerability for the pumping system, reviewing flood inundation vulnerability, and development of a Groundwater Intertie to reduce transmission system vulnerability. Inundation review may be partially completed in partnership with Multnomah County Drainage District.	CSSW	3,000,000
W-21	Powell Valley Well Improvements	The project includes upgrade of the facilities in the previous Powell Valley Road Water District area and connection and integration of these facilities to the PWB water system.	Powell Valley wellfield	3,000,000
n/a	Road 1008	This project will design and construct an overlay for the Bull Run 1008 road.	Bull Run	710,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
n/a	Road 10 MP 0.6-1.8	Design and construct walls, widening, culverts and repave this portion of the Bull Run 10 road.	Bull Run	900,000
n/a	Building Maintenance	The bureau maintains hundreds of structures from the Bull Run watershed to Downtown Portland. These structures range in size from small pump houses to the maintenance hub on Interstate Avenue. The necessary work involves structural repairs and maintenance.	Various/Citywide	3,000,000
n/a	Sandy River Station Upgrade	This project consists of upgrades to the Sandy River Station facilities including an evaluation of a potential move to a different site.	Sandy River station	5,000,000
n/a	West Side Maintenance Facility	A hub is needed on the west side of the Willamette River for maintenance and construction crews, vehicles, equipment and materials, and emergency operations. This project includes construction of the facility within the next 20 years.	West of Willamette River, tbd	5,000,000
n/a	Conduit 5	This project would include installation of sections of a new Conduit 5 as growth occurs and the condition of the existing conduits worsens.	Conduit 5, east of city limits	75,000,000
n/a	Conduits and Transmission Mains	The conduits that bring water to Portland from the Bull Run watershed are pipes 56 to 72 inches in diameter. This program funds repairs, replacements and upgrades to these key pipelines. Reliable service to the City and the City's wholesale customers is the key reason for the bureau's commitment to improve maintenance of this aging infrastructure.	Various/Citywide	63,525,000
W-22	Kelly Butte Reservoir	The purpose of this project is to increase storage capacity from 10MG to 25MG by replacing the existing tank with a buried reservoir. This includes site access, construction access and easements, staging areas, and on-site storage areas. This project establishes Kelly Butte as the key facility that will be used for system pressure equalization and in-town terminal storage in lieu of the Mt. Tabor open reservoirs.	Kelly Butte	66,970,000
n/a	New Conduit Intertie	This project would address concerns about the capability of the conduit system to withstand hazards and deliver an uninterrupted supply to the City. The project will improve reliability of flow during emergency conditions and for maintenance by providing additional isolation and interconnectivity.	Conduit, east of city limits	10,000,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
W-23	Powell Butte Reservoir 2	This LT2 project is being constructed in 2 phases – Phase 1 is complete. The project is currently in Phase 2, the construction of a 50 million gallon buried reservoir at Powell Butte. It includes a short section of Conduit 5, construction of a maintenance and storage facility, replacing the caretaker’s house, construction of an interpretive center and restrooms, reservoir overflow, park improvements and mitigation requirements as part of the conditions for approval in the 2003 LUR Type III CUMP.	Powell Butte	35,220,000
W-24	Powell Butte Reservoir 3	This project constructs a third reservoir at Powell Butte and possible bypass piping around the Butte.	Powell Butte	100,000,000
n/a	Sandy River Conduit Relocation, Phase II	The bureau is committed to increasing the flexibility and preparedness to meet the future challenge of a natural disaster. This project will relocate the Sandy River crossings of Conduit 3. The crossings of Conduit 2 and 4 have already been completed. These conduits were identified in the system vulnerability study as vulnerable to seismic, volcanic, flooding, and other natural and manmade hazards.	Sandy River crossing	5,000,000
W-25	Tabor Reservoir Adjustments	This project includes adjustments to piping, structures and other features at Mt. Tabor in order to move storage elsewhere and physically disconnect the open reservoirs from the public water system for compliance with LT2. Project does not include disposition of the reservoirs after they have been disconnected from the public water system.	Mt. Tabor	3,355,000
W-26	Washington Park Reservoir 3	The project will plan, design and construct a new buried reservoir to replace open reservoir No. 3. This project is one solution toward compliance with LT2 replacement of the open reservoirs. It is assumed that Reservoir # 4 will be used as the overflow detention structure. We envision that the buried reservoir would be topped with a reflecting pond and historical features would be protected to retain its visual appeal.	Washington Park	52,100,000
W-27	West Side Transmission Main Improvements	These mains include the Sam Jackson to Downtown Pipeline and the Jefferson Street Supply mains. These large transmission mains are needed to strengthen the supply to terminal storage located on the west side of the Willamette River.	Various, SW Portland	20,000,000

LIST OF SIGNIFICANT PROJECTS

Map ID	Project Title	Project Description	Location	Rough Cost Estimate (2014-2032)
n/a	Treatment Facilities Improvements	Treatment of Portland's drinking water is the most complex activity the bureau engages in while operating the water system. This project would include several related projects for the Bull Run water supply, at Bull Run Headworks and the Lusted Hill Facility. Projects would likely be driven by State and Federal regulations	Bull Run	150,000,000

Transportation

The List of Significant Projects for Transportation is found in the Transportation System Plan.

