Chapter 13 - Capital Improvement Program - Contents

13.1 Development of CIP ............................................................................................................ 1
   Project Prioritization ............................................................................................................. 1
   Cost-Estimating Methodology ........................................................................................... 2

13.2 2015-2034 Planned Projects ............................................................................................... 3
   Supply Source Projects ....................................................................................................... 6
   Storage Projects .................................................................................................................. 8
   Transmission and Distribution Projects ........................................................................... 8
   Operations and Maintenance Projects ............................................................................. 11
   Reclaimed Water Projects ............................................................................................... 13
   Planning Projects ............................................................................................................... 14
   Development-Related Projects ......................................................................................... 14

Tables
Table 13.1 Project Prioritization Criteria ..................................................................................... 2
Table 13.2 2015-2034 Capital Improvement Program .................................................................. 4

Map
Map 13.1 Capital Improvement Projects, 2015-2034................................................................. 15
CHAPTER 13 - CAPITAL IMPROVEMENT PROGRAM

The Drinking Water Utility uses the Capital Improvement Program (CIP) to plan strategically for investments in capital projects over a 20-year planning horizon. As part of the budgeting process each year, City Council adopts a Capital Facilities Plan, appropriating funds for projects to be implemented during a 6-year planning horizon.

A capital project is a structure, improvement, piece of equipment, land or other major asset that has a useful life of at least five years and a project cost that exceeds $50,000.

The Capital Improvement Program helps meet the Drinking Water Utility’s Goal 6:

**Infrastructure is prudently financed, and sustainably constructed, maintained and operated to ensure reliable delivery of high quality water to a growing community.**

This CIP incorporates projects described in:

- Chapter 4 – Source of Supply
- Chapter 6 – Reclaimed Water Program
- Chapter 7 – Groundwater Protection Program
- Chapter 8 – Source Infrastructure
- Chapter 9 – Storage Infrastructure
- Chapter 10 – Transmission and Distribution Infrastructure
- Chapter 11 – Water Quality Program
- Chapter 12 – Operation and Maintenance Program

This chapter describes the methodology used in developing the CIP, and presents the costs and schedules for projects planned for implementation in 2015-2034. Other projects are described for which schedules are primarily dependent on the timing of future development.

13.1 Development of CIP

To develop the CIP, Utility staff first identified projects that address water system needs or deficiencies. These projects were then prioritized via a formal evaluation process. Generally, projects of higher priority were scheduled for implementation within the six-year planning horizon. Cost estimates for these projects were then developed and escalated to the anticipated year of implementation. Each of these steps is described below.

**Project Prioritization**

The Utility developed a protocol to systematically compare and prioritize the wide range of potential capital projects. The protocol provides a consistent basis for characterizing the benefits from capital projects, comparing projects and documenting the reasons why certain projects are selected for funding. The Utility then used this protocol in a workshop attended by staff responsible for various Utility functions in order to refine the list of projects to be included in the CIP.
The prioritization process considered eight criteria, intended to address the primary benefits provided by typical Utility capital projects. Each criterion has an associated scoring system used to calculate a project priority score. In addition to the raw scores, each of these criteria was weighted. This allowed some criteria to more strongly influence how projects were selected and prioritized.

The eight criteria and the weights selected during the priority-setting workshop are shown in Table 13.1.

<table>
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<tr>
<th>Criteria</th>
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<tr>
<td>Cost Control or Cost-Sharing Opportunities</td>
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<td>Safety and Security</td>
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<td>Growth/Expansion</td>
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<td>Information Benefits</td>
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</table>

The results of the prioritizing process were then reviewed by Utility management, along with an assessment of other information including potential impacts on the Utility’s finances, to finalize the schedule of capital projects included in the 2015-2034 CIP.

**Cost-Estimating Methodology**

Total project-level cost estimates have been developed for each capital project included in the 2015-2034 CIP. Many cost estimates were generated during development of the 2009 water system plan, and have been escalated to 2014 values, according to the Engineering News Record (ENR) cost indexes. For newly developed project cost estimates, each cost includes the following components:

- **Base construction cost.** Includes all labor and material costs needed to construct a project.
- **Sales tax.** Calculated as 8.8 percent (the 2014 local tax rate) of the base construction cost.
- **Construction contingency.** Takes into account the uncertainties associated with estimating project costs at this planning level. Calculated as 25 percent of the total of base construction plus sales tax.
- **Design engineering.** Includes City and consultant design costs, and other related costs, such as permitting and construction administration. For most projects, this is calculated as 25 percent of the base construction cost. However, for projects with more complex design or permitting needs, a higher percentage of the base construction cost is used.
These elements are summed to determine the total project-level cost estimate for a project, expressed in September 2014 dollars. Where applicable, design and construction costs are depicted spanning multiple years, to reflect the phasing typically used for larger projects.

13.2 2015-2034 Planned Projects

The Utility has identified capital projects planned for implementation between 2015 and 2034. In addition, potential projects with schedules driven primarily by development-related activities have been identified.

Table 13.2 presents the schedule of CIP projects planned for implementation between 2015 and 2034. Descriptions of each project are organized by project type. Developer-contributed projects are not included in this table, as they will not require City funding; they are described in the narrative project list.

Some projects received prior appropriations from City Council through adopted Capital Facilities Plans, while other projects reflect future needed appropriations. The City’s future Capital Facilities Plans will reflect the new appropriations needed to implement the CIP shown in Table 13.2. Map 13.1 depicts approximate project locations.

The largest projects included in the first ten years of the CIP (i.e., 2015-2024) are:

- Construction of the new Log Cabin Storage Tank and the associated transmission main extension in the Morse-Merryman Road area.
- Corrosion control treatment facilities at the new McAllister Wellfield.
- Seismic retrofits of the Fir Street Storage Tanks.
- Rehabilitation of the Fones Road Booster Pump Station and nearby water main.

In addition to these and other capital projects, the CIP includes significant investment in ongoing rehabilitation and replacement of system assets such as small diameter water mains, and aging and asbestos cement piping.
### Table 13.2 2015-2034 Capital Improvement Program

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<td>PWVs - East Bay Drive</td>
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<td>AC Pipe - Blvd Road Roundabout - Morse-Merrymen</td>
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1. In September 2014 dollars. Totals of individual years may not equal subtotals, due to rounding.
Supply Source Projects

The following are source-related capital projects that address deficiencies or needs described in previous chapters, as referenced in each project description.

- **WS-1  Briggs Well Construction** (anticipated 2023; estimated $2,250,000)

  **Description:** Drilling an additional groundwater supply well in the Briggs Urban Village area. Water rights were previously purchased and transferred to the well. Drilling was originally scheduled in 2008; however, the project has been delayed primarily due to the need for costly iron and manganese treatment. The City has obtained approval to extend the water rights development schedule until 2019, and anticipates possible future extensions of the water right, as needed, and as negotiated with Ecology. The well, which will pump into Zone 338, is anticipated to provide 1,100 gpm of source capacity.

  **Justification/Need:** Additional source enhances supply redundancy and reliability for Zones 417 and 338 (Chapter 8).

- **WS-2  McAllister Wellfield Corrosion Treatment** (anticipated 2017, estimated $3,300,000)

  **Description:** Construction of corrosion control facilities to raise the pH of water withdrawn from the McAllister Wellfield, in order to maintain compliance with the lead and copper rule.

  **Justification/Need:** Testing indicates that water from the McAllister Wellfield has a low pH, requiring corrosion control treatment to maintain compliance with water quality regulations (Chapter 11).

- **WS-3  McAllister Wellfield Mitigation – Deschutes River Basin** (ongoing)

  **Description:** The City is implementing a water rights mitigation plan associated with the development of the McAllister Wellfield. One of the plan components involves the restoration of riparian land adjacent to the Deschutes River. This property, previously known as Smith Ranch, is now jointly owned by the cities of Olympia, Lacey and Yelm.

  **Justification/Need:** Supports implementation of the McAllister Wellfield Water Rights Mitigation Plan, and will exhibit a level of environmental stewardship desired by the City through improvement of water quality and aquatic habitat (Chapter 4).

- **WS-4  Groundwater Protection (easements, appraisals, etc.)** (anticipated 2021, estimated $45,000)

  **Description:** Provides funding to support installation of groundwater monitoring wells. Depending on well locations, the City may also need to obtain easements on property for wells that are located outside the right-of-way. Appraisals may be needed to determine the cost of the easements.
**Justification/Need:** This is an important element in protecting source water quality from degradation. By owning land or easements for monitoring wells, the City can monitor groundwater quality changes near its water sources and help prevent contamination of critical groundwater resources (Chapter 7).

- **WS-5 Wellhead Protection Program** (anticipated 2019, estimated $400,000)
  
  **Description:** Periodic refinement of the time-of-travel zones previously delineated for the groundwater sources of supply.
  
  **Justification/Need:** Supports protection of the City’s supply sources (Chapter 7).

- **WS-6 Groundwater Monitoring Wells** (anticipated 2019, estimated $650,000)
  
  **Description:** Installation of up to 12 new wells as part of the groundwater monitoring program.
  
  **Justification/Need:** Supports the City’s monitoring of groundwater quality and ability to protect its groundwater sources of supply (Chapter 7).

- **WS-7 Olympia Brewery Water Engineering Analysis** (anticipated 2021, estimated $100,000)
  
  **Description:** Consultant services associated with an engineering evaluation of possible operational and source development options for the Brewery water source. This is a joint effort with the Cities of Lacey and Tumwater.
  
  **Justification/Need:** Supports need for long-term supply development and diversification (Chapter 8).

- **WS-8 Indian Summer Well Chlorination** (anticipated 2017; estimated $150,000)
  
  **Description:** Design and construction of hypo-chlorination facilities for the Indian Summer Well 20 (S12), to replace the existing on-site chlorine generation system.
  
  **Justification/Need:** Transitions treatment away from on-site facilities, which have been problematic for the City operationally (Chapter 11).

- **WS-9 Hoffman Well Treatment** (anticipated 2023; estimated $2,500,000)
  
  **Description:** Design and construction of hypo-chlorination and iron/manganese removal for the Hoffman Well 3 (S08).
  
  **Justification/Need:** Supports need for high quality water from this source (Chapter 11).

- **WS-10 Shana Park Well Water Quality Study** (anticipated 2017, estimated $150,000)
  
  **Description:** Study to evaluate the options for future management of the Shana Park Well 11 (S10), given the evidence of increasing nitrates in East Olympia groundwater. Such options may include transitioning the Shana Park Well to emergency status, drilling of a replacement well, treating for nitrate, or blending with another source.
  
  **Justification/Need:** Supports need for long-term supply development and diversification (Chapter 11).
Storage Projects

The following are storage-related capital projects that address deficiencies or needs described in Chapter 9.

- **ST-1 New Log Cabin Tank Construction** (anticipated 2016, estimated $9,000,000)
  
  **Description:** Construction of an additional storage tank in Zone 417, located south of Morse-Merryman Road and east of the Boulevard Storage Tank. The tank will be built to the same overflow elevation as the Hoffman Storage Tank, to address storage deficiencies in Zone 417.  
  
  **Justification/Need:** Provides additional capacity that addresses current deficiencies in available fire flow and standby storage volumes.

- **ST-2 Fir Street Tank #1 and #2 Seismic Retrofit** (anticipated 2018, estimated $1,000,000)
  
  **Description:** Structural upgrades of the Fir Street Storage Tanks, including the addition of perimeter walls with reinforcing cables and the addition of collars on the interior columns.
  
  **Justification/Need:** Maintains compliance with seismic codes and enhances reliability of these facilities.

- **ST-3 Elliott Tank Seismic Retrofit** (anticipated 2018, estimated $1,250,000)
  
  **Description:** Structural upgrades of the Elliott Storage Tank, including interior column wrapping, dowels to tie the roof slab to perimeter walls, and a perimeter retaining wall.
  
  **Justification/Need:** Maintains compliance with seismic codes and enhances reliability of this facility.

- **ST-4 Hoffman Tank Interior Coating Replacement** (anticipated 2018, estimated $578,000)
  
  **Description:** Replacement of the interior coating of the Hoffman Storage Tank.
  
  **Justification/Need:** Enhances water quality reliability of this facility.

Transmission and Distribution Projects

The following transmission and distribution-related capital projects address deficiencies or needs described in Chapter 10.

- **TD-1 Distribution System Oversizing** (ongoing)
  
  **Description:** Oversizing of distribution pipeline projects associated with development-related improvements. This project provides additional capacity to anticipate future needs that may be greater than at the time of development. Funds are applied to developer projects to cover the additional costs of oversizing.
  
  **Justification/Need:** Supports prudent sizing of distribution facilities to accommodate anticipated future needs and avoids the need to replace undersized facilities in the future.
• TD-2  Morse-Merryman Extension to New Log Cabin Tank (anticipated 2016, estimated $1,200,000)
  
  **Description:** Installation of a new 12-inch water main to connect the planned new Log Cabin Tank with existing distribution piping in Morse-Merryman Road.
  
  **Justification/Need:** Required to convey water from new Log Cabin Storage Tank to the distribution system.

• TD-3  Pressure Reducing Valves (PRVs) – East Bay Drive (anticipated 2020, estimated $247,000)
  
  **Description:** Installation of PRV stations to reduce high pressures along East Bay Drive and allow water to flow from Zone 347 to Zone 226.
  
  **Justification/Need:** Addresses high-pressure situations along East Bay Drive.

• TD-4  AC Pipe - Boulevard Road Roundabout - Morse-Merryman (anticipated 2017, estimated $780,000)
  
  **Description:** Replacement of existing Asbestos Cement (AC) water main during construction of a roundabout in Boulevard Road, at the intersection with Morse-Merryman Road.
  
  **Justification/Need:** Removes AC piping, which is brittle and prone to breaking, from the system. Coordinated with roadway project to take advantage of cost efficiencies and minimize traffic disruptions.

• TD-5  Fones Road Water Main Construction (anticipated 2021, estimated $2,300,000)
  
  **Description:** Replacement of an AC water main in Fones Road from Pacific Avenue to 18th Avenue during planned roadway construction.
  
  **Justification/Need:** Removes AC piping, which is brittle and prone to breaking, from the system. Coordinated with roadway project to take advantage of cost efficiencies and minimize traffic disruptions.

• TD-6  Fones Road Booster Replacement Design & Construction (anticipated 2016, estimated $1,085,000)
  
  **Description:** Replacement of booster pump station.
  
  **Justification/Need:** Addresses current deficiencies in the electrical system, confined space entry, ventilation and aging pumping equipment.

• TD-7  Kaiser Road Water Main Extension to Evergreen Park Drive (anticipated 2018, estimated $760,000)
  
  **Description:** This project will install a new 12-inch water main from LOTT’s Kaiser Road sewer lift station to Evergreen Park Drive, to complete a piping loop to the north end of Zone 298.
  
  **Justification/Need:** Increases distribution system reliability in a 300-acre area which has only one feed, through a PRV at Cooper Point Road.
- **TD-8  Indian Summer Extension to Rich Road** (anticipated 2025, estimated $600,000)
  
  **Description**: Installation of a water main, extending from the existing 12-inch main on Prestwick Lane by Indian Summer Well 20, southwest to the Bonneville Power Administration lines, then west along the power line access road to the existing 12-inch main on Rich Road.
  
  **Justification/Need**: Provides distribution system looping in this part of the system.

- **TD-9  McCormick Valve House** (anticipated 2017, estimated $150,000)
  
  **Description**: Replacement of valves and complicated piping that is difficult to maintain.
  
  **Justification/Need**: Replaces/upgrades aging equipment and improves maintenance efficiency.

- **TD-10  Percival Creek Water Main** (anticipated 2017, estimated $500,000)
  
  **Description**: Replacement of the water main from Evergreen Park Lane to 15th Avenue SW associated with the utility bridge at Percival Creek. The utility bridge is structurally unreliable. The water main will either be replaced on the bridge or installed under the creek by boring depending on the bridge work.
  
  **Justification/Need**: Replaces asset that was damaged in an earthquake and removes aging AC piping to improve system reliability.

- **TD-11  West Bay Booster Station Pump and Electrical Upgrade** (anticipated 2016, estimated $150,000)
  
  **Description**: Replacement of pumps and electrical system upgrades in the West Bay Booster Station.
  
  **Justification/Need**: Replaces/upgrades aging equipment in this facility.

- **TD-12  Meridian Overflow and 36-inch Water Main** (anticipated 2016, estimated $150,000)
  
  **Description**: Improvements to enhance protection of the 36-inch water main and improve the Meridian Tanks’ overflow outlet pipe that daylights next to the 36-inch main. This project is located near the storage tanks on City property.
  
  **Justification/Need**: Improves protection and reliability of existing assets.

- **D-13  Eastside Street and Henderson Boulevard Water Main Extension** (anticipated 2023, estimated $1,200,000)
  
  **Description**: New 16-inch main to replace an existing 10-inch pipe that presents a bottleneck in the Zone 264 distribution system. The replacement line will connect to an existing 16-inch main at Eastside Street, where it originates as a tap off of the 36-inch transmission main near the Fir Street Storage Tanks. The new line will then extend approximately 3,500 feet through the City’s Maintenance Center property and across Henderson Boulevard, terminating at an existing 12-inch main that feeds a portion of Zone 264 west of Henderson.
  
  **Justification/Need**: Increases fire flow and pressures in the westerly portion of Zone 264 during high demand periods.
Operations and Maintenance Projects

The following operations and maintenance-related capital projects address deficiencies or needs described in Chapter 12.

- **OM-1 Small Diameter Water Main Replacement** (ongoing)
  
  **Description:** Replacement of existing small diameter substandard water mains with larger diameter piping. Funds also provide for hydraulic modeling and installation of valves and vaults.
  
  **Justification/Need:** Increases reliability of the distribution system to maintain domestic and fire flows at required minimum pressures.

- **OM-2 Asphalt Overlay Adjustments** (ongoing)
  
  **Description:** Adjustments needed to raise water system components to street level in conjunction with annual asphalt overlay/street reconstruction.
  
  **Justification/Need:** Adjusts water system structures and related components as required during some asphalt overlay and street reconstruction projects.

- **OM-3 Storage Tank Coatings (Interior/Exterior)** (anticipated 2021, estimated $600,000)
  
  **Description:** Periodic maintenance of interior and exterior linings and painting. Each storage tank is scheduled for recoating approximately every 15-20 years.
  
  **Justification/Need:** Maintains reliable water quality and increases longevity of storage tanks.

- **OM-4 Booster Station Upgrade/Rehabilitation** (anticipated 2021, estimated $600,000)
  
  **Description:** Routine upgrades to existing booster stations; includes replacing pumps and making large-scale upgrades to mechanical, electrical and instrumentation systems.
  
  **Justification/Need:** Increases reliability of booster stations.

- **OM-5 AC and Aging Pipe Replacement** (ongoing)
  
  **Description:** Replacement of aging water mains and those constructed of asbestos cement (AC) with new piping. Funds also provide for hydraulic modeling and installing valves and vaults.
  
  **Justification/Need:** Increases the reliability of the distribution system and reduces the potential for leaks in older parts of the system.

- **OM-6 PRV Telemetry (Radio-Based)** (anticipated 2022, estimated $50,000)
  
  **Description:** Installation of radio-based telemetry instrumentation in PRV vaults.
  
  **Justification/Need:** Improves system operation and efficiency by increasing the ability to monitor flows through PRVs. This improves understanding of system operation and provides detailed water usage data to calibrate the hydraulic model.
• **OM-7  Distribution Main Condition Assessments** (ongoing)

**Description:** Implementation of activities, to be defined through the Asset Management Program (Project OM-10), to assess the condition of transmission and distribution system mains. Funds will support annual evaluation of discreet lengths of pipes. The results will be used to identify larger capital projects that will then be prioritized and implemented as funds are available.

**Justification/Need:** Provides information on system condition, and identifies project priorities that will improve reliability of the distribution system.

• **OM-8  Cross Country Mains** (anticipated 2021, estimated $150,000)

**Description:** Replacement and/or relocation of City water mains that extend outside of the right-of-way and into areas that make maintenance difficult.

**Justification/Need:** Improves access to City facilities, for ease of maintenance and increased reliability.

• **OM-9  On-Site Generator Replacement Plan** (anticipated 2023, estimated $300,000)

**Description:** Replacement of on-site backup power generators near the end of their useful life.

**Justification/Need:** Increases reliability of facilities supported by on-site generators.

• **OM-10  Asset Management Program** (ongoing)

**Description:** Implementation of the Utility’s formal asset management program. Funds cover activities such as program administration, condition assessment, asset planning and development. The results of this program will define the details of some of the other projects listed in this section, such as OM-1, OM-3, OM-4, OM-5, OM-7 and OM-9.

**Justification/Need:** Supports pro-active management of the system’s assets.

• **OM-11  Corrosion Control (Aeration) Tower Condition Assessment & Upgrades** (ongoing)

**Description:** Routine upgrades to existing corrosion control towers. Funds provide for condition assessment, planning/design, and large-scale upgrades to mechanical, electrical and instrumentation systems.

**Justification/Need:** Increases reliability of corrosion control towers.

• **OM-12  Water Meter Replacement** (anticipated 2022, estimated $500,000)

**Description:** Replacement of approximately 5,500 retrofitted water service meters that have exceeded their useful life span.

**Justification/Need:** Increases metering accuracy, reduces operational costs associated with meter reading, improves customer service through reduced reading errors, and supports water conservation efforts by enhancing ability to track and characterize water consumption.
• **OM-13  Water Meter AMR Radio Replacement** (anticipated 2022, estimated $200,000)

  *Description*: Replacement of the radio transmitter units associated with the citywide automated meter reading (AMR) system. Approximately 20,000 such units were recently installed in a short time period during deployment of the AMR system. Units will be replaced in a phased manner within the 20-year planning horizon.

  *Justification/Need*: Maintains reliable functioning of the AMR system.

• **OM-14  McAllister Mitigation - Woodland Creek** (ongoing)

  *Description*: Funds the City’s share of the operations and maintenance of a new facility jointly owned with the City of Lacey as part of the McAllister Water Rights Mitigation Plan. The Woodland Creek Groundwater Recharge Facility infiltrates reclaimed water into the shallow groundwater aquifer in the Woodland Creek area, partly offsetting impacts of groundwater withdrawals at the McAllister Wellfield. (See also [Chapter 6](#)).

  *Justification/Need*: Supports continued operation of the McAllister Wellfield and is required as part of the mitigation plan.

**Reclaimed Water Projects**

The following reclaimed water-related capital projects address deficiencies or needs described in Chapter 6.

• **RW-1  Reclaimed Water Infrastructure** (anticipated 2021, estimated $250,000)

  *Description*: Continue development of an infrastructure network to convey reclaimed water to customers or support regional reclaimed water system expansion efforts.

  *Justification/Need*: Supports efficient use of the City’s limited potable water resources.

• **RW-2  Port of Olympia – Eliminate Northern Dead End** (anticipated 2017, estimated $50,000)

  *Description*: Installation of additional reclaimed water piping in the existing portion of the system that provides reclaimed water to the Port, so as to provide looping and eliminate dead ends.

  *Justification/Need*: Reduces water quality concerns in dead-end piping, and supports efficient use of the City’s potable water resources.

• **RW-3  Reclaimed Water Filling Stations** (anticipated 2021, estimated $100,000)

  *Description*: Installation of water filling stations that provide reclaimed water for construction-related purposes.

  *Justification/Need*: Increases the use of reclaimed water, which reduces the need to use potable water for non-potable needs.
Planning Projects

The following planning projects support implementation of the other CIP items listed above.

- **PL-1  Water System Plan** (anticipated 2021, estimated $300,000)
  
  **Description:** Updates to the Water System Plan, which are required every six years by the Washington State Department of Health.

  **Justification/Need:** This is a regulatory requirement, and also ensures the Utility is planning sufficiently to meet future needs and is investing wisely in its infrastructure.

- **PL-2  Infrastructure Pre-Design and Planning** (ongoing)
  
  **Description:** Perform pre-design evaluation and analysis of water system project alternatives.

  **Justification/Need:** Evaluates project needs and costs of CIP projects prior to appropriation in the annual Capital Facilities Plan, in order to refine information provided in the CIP.

Development-Related Projects

The following projects will be implemented as part of private development projects. Scheduling of these improvements will depend on the timing of development activity. Development-related projects are not included in Table 13.2, since no City funds are required.

- **DEV-1  Kaiser Road Pump Station and Storage Tank.** This pump station and storage tank will be constructed as part of a development project planned for the area south of Highway 101 on Kaiser Road. While these facilities will primarily serve future development, they will also address deficiencies in the distribution system’s ability to provide adequate pressures during peak hour demand conditions to a small area of Zone 298, as described in Chapter 10.

- **DEV-2  Kaiser Road South (12-inch).** Installation of 4,900 lineal feet of 12-inch water main, extending from the existing 12-inch main on Kaiser Road near 7th Avenue, south to a point west of Park Drive.

- **DEV-3  Kaiser Road South (8-inch).** Installation of 1,000 lineal feet of 8-inch water main, extending from the future Kaiser Road Storage Tank to Park Avenue.

- **DEV-4  Cooper Point Road North.** Installation of 3,000 lineal feet of 12-inch water main, extending north in Cooper Point Road.

- **DEV-5  Log Cabin Road Extension.** Installation of 4,350 lineal feet of 16-inch water main, extending from the existing 12-inch main at the south end of Van Epps Drive, east to the existing 12-inch main on Wiggins Road by 7th Avenue.

- **DEV-6  South Bay Water Main Extension.** Installation of 10,650 lineal feet of 12-inch water main.

- **DEV-7  26th Avenue Water Main Extension.** Installation of 2,900 lineal feet of 12-inch water main, extending from the existing 12-inch main on 26th Avenue by Huber Lane, east on 26th to a proposed 12-inch main in South Bay.
2015 - 2020 Water System Plan
Capital Improvement Projects 2015 - 2034

City of Olympia
15 - 2015 – 2020 DRAFT Water System Plan
Chapter 13

Legend

CIP Facilities
- Pump Station Improvement
- Valve Improvement
- Water Source Improvement
- Tank Improvement

Retail Service Area
- Existing
- Future

Pressure Zones
- 224
- 264
- 298
- 338
- 347
- 380
- 393
- 417

Map Location Extents

CIP ID Project Name

Water Source
WS-1 Briggs Well Construction
WS-2 McAllister Wellhead Conversion References
WS-3 McAllister Wellhead Conversion - Demolition (Rental
WS-4 McAllister Wellhead Conversion - Demolition, Appraisals, etc.)
WS-5 Wellhead Protection Program
WS-6 Groundwater Monitoring Wells
WS-7 Olympic Discovery Water Engineering Analysis
WS-8 Indian Summer Well Characterization
WS-9 Holland Pond Treatment
WS-10 Alsea Park Wellhead Quality Study

Water Storage
WS-1 New Egg Cabin Tank Construction
WS-2 Fit Street Tank #1 and #2 Semi-Circular
WS-3 Clifton Semi-Circular Reservoir
WS-4 Hoffman Tank Interior Coating Replacement

Transmission and Distribution
TD-1 Distribution System Overiding
TD-2 Extension to New Log Cabin Tank from Mount Rainier
TD-3 Finn - East Bay Drive
TD-4 Alpico - Bird Road Roundabout - Monroe-Marysville
TD-5 3rd Avenue - Commerce Way
TD-6 Roma Road Branch Rehabilitation/Construction
TD-7 Robins Road - Major Extension to Emergeng Park
TD-8 Indian Summer Extension to Rich Road
TD-9 McClellan Valley Avenue
TD-10 Ferrand Creek Water Main
TD-11 Ross Bay Boulevard Substation Pump and Electrical Upgrade
TD-12 Ross Bay Boulevard Electrical Upgrade
TD-13 Hollyside Street and Henderson Boulevard Water Main Extension

Developer Contributions
DV-1 Kibler Knoll Pump Station and Storage Tank
DV-2 Kibler Road South - 4’’
DV-3 Kibler Road South - 6”
DV-4 Kibler Road South - 8”
DV-5 Kibler Road South - 11”
DV-6 Log Cabin Road Extension
DV-7 South Bay Water Main Extension
DV-8 36th Avenue Water Main Extension

Map 13.1
Capital Improvement Projects