CHAPTER 8

CAPITAL IMPROVEMENT PROGRAM AND FINANCIAL ANALYSIS

INTRODUCTION

This chapter presents the Capital Improvement Plan (CIP) for the 6- and 20-year planning periods and analysis of the City's ability to meet future operating expenses and fund water improvements outlined in the previous chapters. Recommended water system improvements and associated costs, along with scheduling information is presented in the following sections according to analyses, identified deficiencies, and recommendations identified in earlier chapters of this plan. For the proposed projects identified in this chapter, preliminary cost estimates are provided in Appendix U. The costs associated with these projects include construction, administrative and engineering costs (25 percent), and a contingency factor (20 percent). The project costs are in 2014 dollars.

In the future other projects may arise which are not identified as part of the City's CIP. Such projects may be deemed necessary for ensuring water quality, preserving emergency water supply, accommodating transportation improvements proposed by other agencies, or addressing unforeseen problems with the water system. Due to budgetary constraints, the completion of these projects may require that the proposed completion dates for projects in the CIP be rescheduled. The City of Bingen retains the flexibility to reschedule projects, as best determined by the City when new information becomes available for evaluation. Each capital improvement project should also be reevaluated to consider the most recent planning efforts, as the proposed completion date for the project approaches.

Projects from the 2008 Capital Improvement Plan that have been completed since 2008 include a Hydrogeologic Investigation (SO-1), installation of a Sodium Hypochlorite Disinfection System (TR-1), and a Leak Detection Survey (D-1). The Old Line Water Main Replacement (D-2) is expected to begin construction in 2015 and the Meter Replacement Program (M-1) is still under way. Table 8-1 shows projects from the 2008 Water System Plan that have been completed or are underway.

TABLE 8-1

City of Bingen Capital Improvement Progress Since 2008

Title	Year Scheduled	Year Completed
Hydrogeologic Investigation (To support water rights change application)	2008	2008
Meter Replacement Program	2008-2009	In Progress
Sodium Hypochlorite Disinfection System	2009	2013
Leak Detection Survey	2009	2010
Oak Street and Steuben Street Water Main Replacement	2010	2015
Update Water System Plan (included water rights application)	2014	2015

CAPITAL IMPROVEMENT PLAN

Table 8-2 summarizes the proposed capital improvement projects for the 6-year and 20-year planning period. All costs discussed in this Chapter are in 2014 dollars. Each project is discussed further in the following sections. Detailed cost estimates for the capital improvement projects are included in Appendix U. Potential rate impacts associated with capital project financing are discussed at the end of this chapter.

SOURCE

SO-1: Emergency Power System and Telemetry Upgrades
Estimated Project Cost: $449,000

In the event of a power outage, the City does not have an emergency power capability at its three active wells. This improvement will provide a single trailer mounted generator with voltage selector switch capable of serving any of the wells. A generator receptacle and manual transfer switch will be installed at each of the three wells to allow a quick generator connection. Additionally, water level pressure transducers will be placed in each of the wells to allow the City to monitor water level at all times. The existing telemetry system will be upgraded to include pump operating status, water levels, flow rates, and totalized flows at each of the City's wells.

SO-2: Additional Well Development and Taste/Odor Treatment
Estimated Project Cost: $2,000,000

In the event that the City decides to supply water only from its own sources, a new well will need to be constructed. Costs include all necessary hydrogeological studies needed to site the well. This requirement is not expected in the 6-year planning horizon, but may become a requirement in the 20-year planning period. As discussed in Chapter 3, the City has an agreement with the City of White Salmon to acquire the additional water

needed to meet the City of Bingen's water needs through the planning period, so this improvement is not a compelling requirement at this time, but should be included in the CIP in the event the agreement with White Salmon is not sustained through the 20-year planning period. No new water rights would be associated with this well. The estimate includes costs associated with taste and odor treatment because of the quality of the City's groundwater if it were to be utilized as the sole source.

STORAGE

ST-1: CT Piping and Inlet/Outlet Valves at Old Reservoir
Estimated Project Cost: $69,000

The City desires the ability to isolate the Old Reservoir by installing inlet and outlet valves. In addition, with the Old Reservoir out of service additional CT volume will be needed because the first connection is 179 feet from the Old Reservoir and inadequate CT volume would exist with only this line in service. Based on a chlorine dose of 1.5 mg/L and projected 2034 peak flow of 502 gpm, an additional CT volume of 2,342 gallons is required to achieve a contact volume of 3,072 gallons. This project will include inlet and outlet valves, and approximately 177 feet of 18-inch pipe.

ST-2: Replace Old Reservoir
Estimated Project Cost: $625,000

As shown in the storage analysis in Chapter 3, the City currently has enough storage to meet projected demands through the 20-year planning period if fire flow is nested. However, the Old Reservoir is now 65 years old and is effectively at the end of its useful life. An alternate to replacing this reservoir would be to provide the necessary structural repairs and exterior and interior recoating (recommended in the 2006 inspection report by Liquivision), but the cost for the repair and recoating work is estimated to be between $300,000 and $350,000 ($200,000 for recoating and $100,000 to $150,000 for structural repairs) and constructing a new reservoir is considered more cost effective since it would last much longer than a refurbished 65 year old reservoir. This improvement is placed in the 20-year planning period because there are no signs of immediate structural failure of the reservoir, but the City will likely have to replace the reservoir within the next 20 years due to structural failure, irreversible damage due to continued rusting, or a combination of the two.

DISTRIBUTION SYSTEM

Chapter 3 evaluated the distribution system's capacity and ability to provide adequate system pressures and fire flows. The following projects will address pressure and fire flow issues identified in the distribution system analysis.

PROJECTS D-1 TO D-3: REPLACE OLD WATERLINES THROUGHOUT CITY

These projects will replace old steel and asbestos concrete water lines that are highly susceptible to breaks and leakage, but are very difficult to repair due to the age and type of material. The timing of these projects will vary and may be scheduled in conjunction with roadway improvements done in the area. All of these improvements are placed in the 20-year planning period since they currently do not present a safety or health concern.

D-1: Oak Street and Steuben Street Water Main Replacement
Estimated Project Cost: $575,000

This project replaces 560 feet of 3-inch steel pipe on Steuben Street (SR 4), 1,750 feet of 3-inch steel pipe on Oak Street (SR 141 – also referred to as the "Old Line") and 330 feet of 3-inch steel waterline on Lois Lane, a service spur off of Oak Street. The 2008 Water System Plan only included the Oak Street ("Old Line") portion of the project. The project has been modified to include a portion of the water main on Steuben Street. The water main on Oak Street is believed to be the source of significant distribution system leakage based on the differences in the meter readings at the intertie and the sum of the readings of service meters on this line. A leak on the Steuben Street water main was previously repaired in early 2012, but the City desires to replace a section of the line that is known to be deteriorated. Both water mains will be replaced with 6-inch PVC or ductile iron pipe. The Oak Street project without Lois Lane was included as project D-2 (Old Line) in the 2008 Water System Plan. The City has obtained DWSRF funds to finance this project.

D-2: Franklin Street Water Main Replacement
Estimated Project Cost: $326,000

The existing 6-inch water main along Franklin Street is asbestos concrete (AC) and will be replaced with 6-inch PVC. This line is approximately 1,890 lineal feet and shall be replaced with PVC pipe. This project is placed in the 20 year planning period because it is not causing any deficiencies, but is aging and could potentially present problems in the future such as leaks or breaks if it is not replaced.

D-3: Cedar Street Water Main Replacement
Estimated Project Cost: $88,000

The existing 6-inch water main along Cedar Street is asbestos concrete (AC) and will be replaced with 6-inch PVC. This line is approximately 500 lineal feet and shall be replaced with PVC pipe. This project is placed in the 20 year planning period because it is not causing any deficiencies, but is aging and could potentially present problems in the future such as leaks or breaks if it is not replaced.

D-4: Jefferson and Maple Street Water Main Replacement
Estimated Project Cost: $228,000

The existing 6-inch water main along Cedar Street is asbestos concrete (AC) and will be replaced with 8-inch PVC. This line is approximately 1,190 lineal feet and shall be replaced with PVC pipe. This project is placed in the 20 year planning period because it is not causing any deficiencies, but is aging and could potentially present problems in the future such as leaks or breaks if it is not replaced.

METERING

M-1: SDS Lumber Automated Meter Reading (AMR) System
Estimated Project Cost: $13,000

This cost estimate includes the two 6-inch meters at SDS Lumber. The meters are currently read manually. The City will replace these meters with radio read capable meters to be consistent with the rest of the City's service meters which are currently in the process of being replaced.

M-2: Underwood Fruit Meter Vault
Estimated Cost: $200,000

The existing access vault for the three service meters at Underwood Fruit is too narrow and deep to allow maintenance personnel to access these meters. A new larger diameter vault would replace the existing vault located on SR 14. This project will be completed in the 6-year planning period to help the City provide accurate accounting for its water consumption.

PLANNING DOCUMENTS

P-1: Water System Plan Update
Estimated Project Cost: $45,000

The City will be required to update this Water System Plan 6 years after it is approved by DOH. This improvement is placed in the 20-year planning period.

CAPITAL IMPROVEMENT SUMMARY AND SCHEDULE

Table 8-2 provides a summary and proposed schedule of the identified projects. Costs shown in Table 8-2 are in year 2014 dollars.

TABLE 8-2

City of Bingen Summary of Capital Improvement Projects

No.	Title	Year	Project Cost
M-1	Meter Replacement Program	2015	$13,000
D-1	Oak Street and Steuben Street Water Main Replacement	2015	$575,000
M-2	Underwood Fruit Vault Replacement	2016	$200,000
6-Year Capital Improvement Total			**$788,000**
P-1	Update Water System Plan	2020	$45,000
ST-1	CT Piping & Old Reservoir Isolation	2021	$69,000
SO-1	Emergency Power System and Telemetry Upgrades	2021	$449,000
D-2	Franklin Street Water Main Replacement	2022	$326,000
D-3	Cedar Street Water Main Replacement	2024	$88,000
D-4	Jefferson and Maple Street Water Main Replacement	2026	$228,000
SO-2	Additional Well Development	2030	$2,000,000
ST-2	Replace Old Reservoir	2032	$625,000
20-Year Capital Improvement Total			**$3,830,000**
Complete Capital Improvement Total			**$4,618,000**

(1) Costs are in 2014 dollars.

FINANCIAL ANALYSIS

CURRENT WATER RATES

The City's water rates are defined in Bingen Municipal Code (BMC) 13.04.120 (Appendix V), Service Classifications and Charges Designated for Water Service.

For billing purposes, customers are classified into four categories as follows:

- Residential
- Commercial
- Light Industrial/Agricultural
- Heavy Industrial

The monthly water rate is based upon customer class. The base rates, effective January 2014, are given in Table 8-3.

TABLE 8-3

2014 Monthly Billing Rates[1]

Meter Size	Monthly Base Rate
3/4-Inch Single-Family Residential	$27.05
3/4-Inch Other	$41.33
1-Inch Other	$65.65
1-1/2-Inch Other	$131.27
2-Inch Other	$196.92
3-Inch Other	$407.20
4-Inch Other	$570.07
6-Inch Other	$855.72

(1) Effective January 2014.

These rates are raised by 5 percent each year. The monthly billing rate is multiplied by 1.25 for customers outside of City limits. This rate includes a base volume of water. Monthly volumes and overage fees are shown in Table 8-4.

TABLE 8-4

2014 Usage Fees

Customer Classification	Gallons per Month Included in Billing Rate	Overage Rate per 1,000 Gallons
Single-Family Residential	1-10,000	$1.52
Single-Family Residential	10,001-20,000	$2.56
Single-Family Residential	>20,000	$3.83
All Others	10,000	$2.32

SYSTEM HOOKUP CHARGES

New customers are required to pay fees to offset the costs to the utility of extending service to the new customer. Hookup charges are based on meter size and are detailed in Table 8-5. There is also a $25 new account setup fee.

TABLE 8-5

New Customer Hookup Fees

Meter Size	Rate
3/4"	$750
1"	$1,875
1.5"	$3,000
2"	$4,125
3"	$6,000
4"	$18,750
6"	$37,500
8"	$60,000

HISTORICAL FINANCIAL OPERATIONS

Water utility revenues for the years 2010 to 2014 are summarized in Table 8-6. These include the projected revenues for 2014 as provided by the City. The City has seen a general increase in water revenues.

TABLE 8-6

Historical Operating Revenue

Operating Revenue	2009	2010	2011	2012	2013	2014 Budget
Charges for Services[1]	$213,530.13	$250,509.73	$286,553.33	$295,469.31	$365,219.87	$349,767.00
Investment Interest	$502.40	$105.15	$31.23	$0.00	$111.36	$136.00
Miscellaneous Revenue	($5.00)	$0.00	$740.00	$2,266.30	$2,600.52	$0.00
Total Operating Revenue	**$214,027.53**	**$250,614.88**	**$287,324.56**	**$297,735.61**	**$367,931.75**	**$349,903.00**

(1) Includes water sales to Fire Department, new account fees, late fees, disconnect fees, water hookups and general water sales.

Table 8-7 summarizes the cash balances, revenue and expenditures for years 2010 to 2014. Transfers represent money moved from the water utility's operating budget into other funds. These include the share of City administration costs attributed to the water utility, transfers to an equipment reserve fund which is shared by water and sewer, a street fund to pay for pavement repairs and a water construction fund. In addition, the utility will be paying back a Drinking Water State Revolving Fund (DWSRF) loan beginning in 2017.

TABLE 8-7

Historical Operating Revenue and Expenditures Summary

Operating Expenditures	2009	2010	2011	2012	2013	2014 Budget
Beginning Cash Balance	$95,179.49	$110,930.17	$63,700.18	$116,344.57	$171,673.98	$184,878.00
Total Revenues	**$214,027.53**	**$250,614.88**	**$287,324.56**	**$297,735.61**	**$367,931.75**	**$349,903.00**
Total Expenditures	$156,216.85	$213,667.09	$183,585.43	$192,810.74	$215,467.70	$242,233.00
Total Transfers Out	$42,060.00	$84,177.78	$51,094.74	$49,595.46	$103,095.86	$107,670.00
Total Expenditures and Transfers	**$198,276.85**	**$297,844.87**	**$234,680.17**	**$242,406.20**	**$318,563.56**	**$349,903.00**
Net Revenue	$15,750.68	($47,229.99)	$52,644.39	$55,329.41	$49,368.19	$0.00
Ending Cash Balance	**$110,930.17**	**$63,700.18**	**$116,344.57**	**$171,673.98**	**$221,042.17**	**$184,878.00**

PROJECTED OPERATING REVENUES AND EXPENSES

Tables 8-6 and 8-7 show the historical data upon which the following predictions were based. Forecast factors used to determine the projections are shown in Table 8-8. The ERU growth rate was taken as equal to the City's population growth rate, which is detailed in Chapter 2. The City has secured a Drinking Water State Revolving Fund (DWSRF) Loan in the amount of $554,400 to upgrade the Old Line (D-1). This loan is shown as a revenue in Table 8-9. The City will begin to pay back the loan in 2017 according to the payment plan provided by City staff, as shown in Table 8-9.

TABLE 8-8

Forecast Factors

Forecast Factors	Value
Water ERU Growth Rate	1.0%
Annual Rate Increase	5.0%(1)
Annual O&M Increase	5.0%
General Inflation Rate	3.5%
Project Cost Inflation Rate	3.0%

(1) From City ordinance.

FUTURE EXPENDITURES

Table 8-9 summarizes projected water utility expenses for the years 2014 through 2020. Future expenses have been projected based on a review of the historical financial data provided by the City and the use of the forecast factors described in Table 8-8. Operations and maintenance costs are projected to increase with the cost of living adjustment rate and the general inflation rate. Transfers to the current administration cost fund are predicted to increase with inflation. Transfers to the street account have been a constant $2,000 annually and are assumed to continue at the same rate. The bond

redemption transfers are laid out by the City in their long-term debt services requirements and payments will continue through the current planning period.

FUTURE REVENUES

Table 8-9 is the 6-year operating budget for the City's water utility and summarizes projected water utility revenues for the years 2014 through 2020. Future revenues have been projected based on a review of the historical water revenues provided by the City and by using the forecast factors described in Table 8-8. The City's water rates are set to increase 5 percent yearly and these increases will continue through the current planning period. The growth rate in ERUs is very small resulting in the majority of the revenue growth coming from the water rate increase.

The City's operating budget assumes that the City will receive a DWSRF loan with an interest rate of 1 percent (based on City providing 10 percent down on the loan) in 2015 to fund the Old Line Replacement Project (D-1). The ending cash balance for each year represents projected cash reserves for the water utility.

TABLE 8-9

Projected Revenue and Expenditures Summary

Water Growth	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
ERUs[1]	703	710	717	724	732	739
Residential Base Rate[2]	$27.05	$28.40	$29.82	$31.31	$32.88	$34.52
Expenditures	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
O&M Total[3]	$214,559	$223,141	$232,067	$241,350	$251,003	$261,044
Capital Improvements[4][5]	$-	$605,250	$212,180	$-	$-	$-
Transfer to Current[6]	$51,657	$53,465	$55,336	$57,273	$59,277	$61,352
Transfer to Street	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Transfer to Water Construction[6]	$52,978	$54,832	$56,751	$58,737	$60,793	$62,921
Transfer to DWSRF Loan[6]	$33,598	$34,774	$35,991	$37,251	$38,554	$39,904
Transfers Total	$140,232	$145,070	$150,078	$155,261	$160,625	$166,177
DWSRF Loan Repayment[7]	$-	$-	$-	$42,273	$33,317	$33,037
Expenditures Total	**$354,791**	**$973,462**	**$594,325**	**$438,883**	**$444,945**	**$460,257**
Water Revenues	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Water Sales[2][8]	$387,133	$410,361	$434,983	$461,082	$488,747	$518,071
DWSRF Loan	$559,944	$-	$-	$-	$-	$-
Other[8]	$2,739	$2,766	$2,794	$2,822	$2,850	$2,879
Total Revenue	**$949,816**	**$413,127**	**$437,777**	**$463,904**	**$491,597**	**$520,950**
Operating Cash Flows	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Beginning Cash Balance[9]	$244,415	$839,440	$279,106	$122,558	$147,579	$194,231
Total Revenues	$949,816	$413,127	$437,777	$463,904	$491,597	$520,950
Total Expenditures	$354,791	$973,462	$594,325	$438,883	$444,945	$460,257
Ending Cash Balance[9]	**$839,440**	**$279,106**	**$122,558**	**$147,579**	**$194,231**	**$254,924**

(1) From Chapter 2 Table 2-12, reduced by 20 percent to be conservative estimate.
(2) Adjusted using annual rate increase described in Table 8-8.
(3) Adjusted using annual O&M increase described in Table 8-8.
(4) Yearly total capital improvement costs from Table 8-2
(5) Adjusted using project cost inflation rate described in Table 8-8.
(6) Adjusted using general inflation rate described in Table 8-8.
(7) From DWSRF loan repayment schedule provided by City.
(8) Adjusted using water ERU growth rate described in Table 8-8.
(9) Combined from O&M, Water Construction and Water Equipment Funds.

The ending balances for the water utility account are insufficient to address the capital projects that the City may need to fund in the years following the 6-year planning period (after 2020). Therefore the City will need to consider obtaining outside funding for these projects.

AVAILABLE CAPITAL PROJECT FUNDING SOURCES

The following are funding sources available for financing construction of water utility facilities.

Grants:	Community Development Block Grant (CDBG) US Economic Development Administration (US EDA) USDA Rural Development (RD)
Loans:	Drinking Water State Revolving Fund (DWSRF) Public Works Trust Fund (PWTF) Community Economic Revitalization Board (CERB) USDA Rural Development (RD)
Bonds:	Revenue Bonds General Obligation Bonds
Other:	Utility Local Improvement Districts

DRINKING WATER STATE REVOLVING FUND (DWSRF)

In 1996, Congress established the Drinking Water State Revolving Fund through the reauthorization of the federal Safe Drinking Water Act. The program is managed by both the Washington State Department of Health and the Washington State Public Works Board. The purpose of the program is to provide low-interest loans to assist publicly- and privately-owned water systems improve drinking water and protect public health. DWSRF loans cannot be used for projects whose purpose is primarily for fire flow or growth purposes.

Eligible publicly-owned water systems include city and county governments, public utility districts, and special purpose districts. Privately-owned systems are eligible as long as they are a Group A system.

Eligible projects include the following:

- New source
- Source reconstruction
- Disinfection improvements/treatment
- Filtration
- New reservoir or reservoir improvements

- Treatment plant discharge improvements
- Water main or distribution improvements (including main extensions to connect to safe and reliable drinking water sources, booster pumps, and seismic improvements)
- Replacing aging infrastructure or making distribution improvements to maintain compliance or further protect public health
- Restructuring and consolidation projects to take over non-compliant, failing, or struggling water systems
- Security measures, as a stand-alone project
- Backflow prevention, as a stand-alone project

Maximum award per single water system is $12,000,000 and for combining systems an award of $24,000,000 is available. DWSRF requires a 1 percent loan fee, but no local match. A summary of interest rates and loan terms is presented in Table 8-10.

TABLE 8-10

Drinking Water State Revolving Fund Loan Terms

Applicant's Income Level	Interest Rate	Loan Fee	Repayment period
Water system is not economically disadvantaged	1.5% Fixed	1% at loan execution(1)	20 years or life of project, whichever is less
Projects with basic interest rate of 1.5% that are completed within 24 months of contract execution	Adjusted to 1.0% fixed at project closeout	1% at loan execution(1)	20 years or life of project, whichever is less
Water system with an affordability index between 1.5% and 2.0%	1% interest on loan	1% at loan execution(1)	20 years or life of project, whichever is less
Water system with an affordability index between 2.01% and 3.5%	30% principal forgiveness & 1% interest on loan	N/A(2)	20 years or life of project, whichever is less
Water system with an affordability index of 3.51% or higher	50% principal forgiveness & 1% interest on loan	N/A(2)	20 years or life of project, whichever is less
Eligible restructuring/consolidation projects proposed by municipal Group A water systems. Projects must result in a change in ownership prior to signing the funding contract.	50% principal forgiveness & 1% interest on loan	N/A(2)	20 years or life of project, whichever is less

(1) Loan fee is not subject to loan limit.
(2) Water systems receiving subsidy are not subject to loan fees.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

The Community Development Block Grant program is a competitive source of federal funding for a broad range of community development projects. A primary requirement of the CDBG program is that the project must principally benefit at least 51 percent of the low-to-moderate income (LMI) residents of the project area. The CDBG program received about $11 million in federal funds for fiscal year 2014. CDBG has three programs pertaining to water systems including General Purpose, Planning Only, and Imminent Threat. The General Purpose program provides grant funds for the design, construction, or reconstruction of water and sewer systems up to the amount of $1,000,000. However, the funding is limited to $10,000 per household. The Planning Only program includes projects such as comprehensive plans, community development plans, capital improvement plans, and other plans such as land use and urban environmental design, economic development, floodplain and wetlands management, transportation, and utilities. Planning only grants are limited to $24,000 for a single applicant, $35,000 for a single jurisdiction that addresses urgent public health and safety needs, or $40,000 for a joint applicant. The Imminent Threat Grant program includes repairing unanticipated water system damages that pose an immediate, urgent threat to public health and safety. This funding is limited to $100,000 and depends upon fund availability. It is intended to fund a temporary fix while funding for a permanent solution is secured.

Eligible applicants for the CDBG programs include cities and towns with less than 50,000 people or counties with populations less than 200,000. Though port districts and economic development districts are not eligible to apply directly, a city or county can submit a joint application and include these entities as partners. At the time of preparation of this Plan, due to data issued by the Department of Housing and Urban Development (HUD) and the State of Washington, the City of Bingen is not eligible for this grant unless a full income survey is performed.

PUBLIC WORKS TRUST FUND (PWTF)

The Public Works Trust Fund is a revolving loan fund designed to help local governments finance public works projects through low-interest loans and technical assistance. The PWTF, established in 1985 by legislative action, offers loans substantially below market rates payable over periods ranging up to 20 years. To be eligible for the PWTF programs, an applicant must be a local government such as a city, county, or a special purpose utility district.

The interest rate for the 2016 Construction Loan Program is 2.55 percent and limited to $7 million per jurisdiction.

The Construction Program accepts applications once per year in May, and the money becomes available approximately one year later. The Pre-Construction and Planning programs are open on year-round basis and must be submitted to the Public Works Board

prior the 15th of the month to be reviewed at the next Board meeting where funding is available. It has not been available recently. These funds become available shortly after the Public Works Board makes their final decision as to the award. Emergency projects must have a locally declared emergency and are applied for on an open cycle depending on the availability of funds. Project expenditures are reimbursable from the date of the declared emergency.

An applicant must have a long-term plan for financing its public works needs. If the applicant is a county or city, it must adopt the 1/4 percent real estate excise tax that is dedicated to public works construction projects. Eligible public works projects include streets and roads, bridges, storm sewers, sanitary sewer collection and treatment systems, and domestic water. Loans are presently offered only for purposes of repair, replacement, rehabilitation, reconstruction, or improvement of existing eligible public works systems. Eligible project costs can include expenses related to serving 20-year forecasted growth as identified in comprehensive plans.

Since substantially more trust fund dollars are requested than are available, local jurisdictions must compete for the available funds. The applications are carefully evaluated, and the Public Works Board submits a prioritized list of those projects to the Legislature that are recommended to receive low-interest financing. The Legislature reviews the list and indicates its approval through the passage of an appropriation from the Public Works Assistance Account to cover the cost of the proposed loans. Once the Governor has signed the appropriation bill into law (an action that usually occurs by the following April), those local governments recommended to receive loans are offered a formal loan agreement with appropriate interest rates and terms as determined by the Public Works Board. PWTF funding can be diverted to the State General Fund by the legislature to cover budget short falls. This has occurred in recent years.

COMMUNITY ECONOMIC REVITALIZATION BOARD (CERB)

The Community Economic Revitalization Board's prime mission is to partner with business and private industry and local governments to maintain and create jobs. Established by the Legislature in 1982, CERB provides low-interest loans, and in unique circumstances grants, to help finance local public infrastructure necessary to develop or retain stable business and industrial activities. Projects eligible for funding include roads, domestic and industrial water systems, sanitary and storm sewers, port facilities, and general purpose industrial buildings.

CERB provides loans up to $1 million and, and where applicable, grants in the amount of $300,000. The interest rate is tied to the current cost of a 10-year bond and a local match of 10 percent is required.

Eligible applicants include Washington State subdivisions in partnership with private enterprise. If there is no economic partner, a local government can produce a feasibility study that documents realistic job retention or creation. Applications must be submitted

45 days prior to a regularly scheduled CERB Meeting, which typically meets in January, March, July, and November

USDA RURAL DEVELOPMENT, RURAL UTILITY SERVICES (RUS)

The RD Rural Utility Service administers a water and wastewater loan and grant program to improve the quality of life and promote economic development in rural areas.

Rural Development has a loan program that, under certain conditions, includes limited grant funds. Grants may be awarded when the annual debt service portion of the utility rate exceeds 1.0 percent to 1.5 percent of the municipality's 2000 median household income.

In addition, RD has a loan program for needy communities that cannot obtain funding by commercial means through the sale of revenue bonds. The loan program provides 30- to 40-year loans at an interest rate that is based on federal rates and varies with the commercial market. RD loans are revenue bonds with a 1.1 debt coverage factor.

Eligible projects include the construction, expansion, extension or improvement of rural water, sanitary sewers, solid waste disposal, storm, and wastewater disposal facilities.

Basic criteria for RD funding follow:

- Dependent on inability to obtain funds from other sources at reasonable terms.
- 45 percent grant available if the median household income of the service area exceeds 80 percent of the statewide non-metropolitan median household income.
- 75 percent grant eligible if the service area is below the higher of the poverty line or 80 percent of the state non-metropolitan median household income, and the project is necessary to alleviate a health and safety issue.

Eligible applicants municipalities; counties; non-profit corporations, associations, or cooperatives; and federally recognized Indian tribes in rural areas with populations less than 10,000.

US ECONOMIC DEVELOPMENT ADMINISTRATION (US EDA)

US EDA offers competitive grants up to $1 million for projects from Region 10. Projects are selected locally by an economic development district and submitted to Congress for competitive selection among other regions in the US. Similar to CERB, applicants must have an industrial partner ready to proceed or a feasibility study that establishes realistic job creation.

REVENUE BONDS

The most common source of funds for construction of major utility improvements is the sale of revenue bonds. These funds are tax-free bonds issued by a city or county. The major source of funds for debt service on revenue bonds is from monthly sewer service charges. In order to qualify to sell revenue bonds marketable to investors, the bonds typically have contractual provisions for the city or county to meet debt coverage requirements. The city or county must show that its annual net operating income (gross income less operation and maintenance expenses) is equal to or greater than a factor of 1.2 to 1.4 times the annual debt service on all par debt. If a coverage factor has not been specified, it will be determined at the time of any future bond issues.

GENERAL OBLIGATION BONDS

By means of council action or special election general obligation bonds can be issued to finance almost any projects of general benefit to the city or county. The bonds are repaid by tax assessments levied against all privately owned properties within the jurisdiction. This includes vacant property that would not otherwise contribute to the cost of the specific improvements. This type of bond issue is usually reserved for municipal improvements that are of general benefit to the public, such as arterial streets, bridges, lighting, municipal buildings, firefighting equipment, parks, and water and wastewater facilities. General obligation bonds are the most attractive bonds to investors because they are backed by the municipality's full taxing authority and carry the lowest rate of interest of any type of bond that a city may issue.

Disadvantages of general obligation bonds include the following:

- Voter approval is often required. The city or county will incur the legal costs of drafting a ballot measure and pay for the cost of holding a special election. There is also the additional cost of investing staff time in public education of the need for the project, yet there is always uncertainty to the outcome of elections.

- There are legal, as well as practical limits on the amount of general obligation debt a city can issue. Financing capital improvements through general obligation debt reduces the ability of the city or county to issue additional general obligation debt, which is often the only source of outside financing for many general government facilities.

UTILITY LOCAL IMPROVEMENT DISTRICTS

Another potential source of funds for improvements can be obtained through the formation of Utility Local Improvement Districts (ULIDs) involving a special assessment made against properties benefiting by the improvements. ULID bonds are further backed by a legal claim to the revenues generated by the utility, similar to revenue bonds.

Sewer system expansion is a frequent application of ULID financing. Typically, ULIDs are formed by the jurisdiction at the written request (by petition) of the property owners within a specific section of the service area. Upon receipt of a sufficient number of signatures or petitions, and acceptance by the council, the local improvement area is formed. Therefore, a sewer system is designed for that particular area in accordance with a sewer comprehensive plan. Each separate property in the ULID is assessed in accordance with the special benefits the property receives from the water or wastewater system improvements. A area wide ULID could form part of a financing package for large-scale capital projects such as sewer line extensions or replacements that benefit all residents within the service area. The assessment places a lien on the property that must be paid in full upon sale of the property. ULID participants have the option of paying their assessment immediately upon receipt, thereby reducing the portion of the costs financed by the ULID bonds.

The advantages of ULID financing, as opposed to rate financing, to the property owner include:

- The ability to avoid interest costs by early payment of assessments.
- If the ULID assessment is paid in installments, it may be eligible to be deducted from federal income taxes.
- Low-income senior citizens may be able to defer assessment payments until the property is sold.
- Some Community Block Grant funds are available to property owners with incomes near or below poverty level. Funds are available only to reduce assessments.

The major disadvantage to the ULID process is that it may be politically difficult to approve formation. The ULID process may be stopped if 40 percent of the property owners protest its formation. Also, there are significant legal and administrative costs associated with the ULID process, which increases total project costs by approximately 30 percent over other financing options.