

# Chapter 6 - Project Financing and Implementation

---

## Introduction

This chapter of the Wastewater Facilities Plan (WWFP) Update evaluates the financial status of the City's Sewer Department and outlines alternatives for financing John Day's proposed wastewater system improvements. A summary of state and federal funding programs is presented, including a review of funding options available to the City for the selected wastewater system improvements project. To construct the proposed improvements, a financing plan must be developed that is acceptable to the citizens of John Day. Because of the high estimated cost of the improvements, financing resources should include local funding and loan/grant funding, if available.

Although a detailed analysis of the City of John Day's current sewer rate structure is beyond the scope of this WWFP Update, some discussion of the existing rate structure, and current and future sewer system budgets, is included. As a general rule, most utility rate structures include funding for operations, periodic minor system improvements and maintenance items, payroll costs for staff, and a set-aside for future improvements. A summary of the current sewer rate structure is presented hereafter.

## Current Sewer Rates and Revenue

Operation and maintenance of the existing wastewater system is financed through the City's annual budget. Revenue is obtained primarily from sewer user fees. Sewer rates that were current at the time of this WWFP Update, and became effective on January 1, 2018, are summarized on the following table.

**TABLE 6-1  
CITY OF JOHN DAY MONTHLY SEWER RATE INFORMATION**

Type of User	User Rate
Single-Family Unit and Multi-Family Units <sup>1</sup>	\$46.00 per month
Commercial and Industrial <sup>2</sup>	Monthly incurred charge: 97 percent of the six winter average monthly incurred water charge plus \$2.00 (i.e., total incurred water charges for November, December, January, February, March, and April divided by 6 equals the monthly average of winter-incurred charges) or Based Incurred Charges (minimum) <sup>3</sup>
Schools	\$46.00 per month for the first 20 students plus \$46.00 per month for each 20 students thereafter based on a count taken in January and September of every year, except during June, July, and August when a \$46.00 minimum rate shall be applied.
Commercial Septic Tank or Port-A-Potty Dumping	\$0.30 per gallon

<sup>1</sup> Includes, but is not limited to, duplex, triplex, fourplex, and apartments, mobile home park, and recreational vehicle park.

<sup>2</sup> The incurred sewer charges per month shall be either the calculated monthly incurred charge or the base incurred charge, whichever is greater as determined each year and will be effective January 1 each year.

<sup>3</sup> Base incurred charge (minimum)

- a. \$52.00 - Service stations, garages, and tire shops.
- b. \$62.50 - Hotels, motels, trailer or mobile home courts, apartments with four or more units, laundries, food and meat processing, and dairies.
- c. \$50.00 - All others; per unit.

Since the City of John Day accepts the City of Canyon City's wastewater, Canyon City pays John Day a yearly fee based on its proportionate share of operation, maintenance, and replacement (OM&R) costs and improvements costs for the wastewater treatment facility (WWTF).

A copy of the agreement between John Day and Canyon City to establish incurred sewer service and connection charges is located in [Appendix E](#).

As of May 2018, the City of John Day had the following number of sewer service accounts billed.

**TABLE 6-2  
CITY OF JOHN DAY SEWER SERVICE ACCOUNTS**

Account Type	Total Number of Accounts
Residential (Single-Family Unit and Multi-Family Units)	559
Public	30
Commercial	138
Industrial	4
Government	12
<b>TOTAL</b>	<b>743</b>

The revenue generated from the City's sewer rates, connection fees, and from Canyon City is presented on the following table. John Day's total revenue has increased at an average annual rate of 5.1 percent between 2011 and 2017. John Day has steadily increased sewer rates in one-dollar increments each year in anticipation of a wastewater system improvements project, and the City plans to continue this trend until a fee is established that will fund the OM&R costs, plus satisfy any debt service incurred from the wastewater system improvements project. Revenue from Canyon City has increased at an average annual rate of 16 percent between 2011 and 2016. Payment in 2017 was zero due to the fee agreement between John Day and Canyon City not being finalized.

**TABLE 6-3  
CITY OF JOHN DAY SEWER DEPARTMENT REVENUE**

<b>Fiscal Year</b>	<b>Total Revenue from City of John Day Sewer Rates and Connection Fees (Operating Revenue)</b>	<b>Revenue from Canyon City</b>
2011	\$439,079	\$24,199
2012	\$432,585	\$48,973
2013	\$471,159	\$59,995
2014	\$486,820	\$64,789
2015	\$520,674	\$52,160
2016	\$547,102	\$59,002
2017	\$624,038	\$0

**Current Financial Status**

The annual cost of operating and maintaining the John Day sewer system is summarized on Figure 6-1. The costs presented were obtained from the City's financial statements and include all costs for the wastewater system, such as OM&R, staff payroll, and existing debt service. These data are presented to provide insight into the magnitude of costs required to operate the City's existing WWTF and collection system. For funding and other financial analysis, it is recommended that the audited financial statements be reviewed prior to considering any available revenue for future debt purposes.

***Historical and Projected Budget Trends***

Figure 6-1 shows that generally over the past five years the City has been able to meet annual expenditures, except in years 2012 and 2017. At that time, the City had a net loss of \$20,485 and \$3,033, respectively. The losses in each of these years were due in part to above average OM&R expenditures.

A graphical plot of the City of John Day's sewer system budget, showing revenue and expenditures, can be found on Figure 6-2. Generally, by plotting a "trend" line for OM&R expenditures (which includes the reserve fund and capital outlay), future expenditures can be estimated assuming no changes to the sewer system occur. The City's OM&R expenditures have steadily increased over the years from a low of \$366,240 in fiscal year 2011 to a high of \$549,007 in 2017. The actual OM&R trend line on Figure 6-2 shows an average annual increased OM&R expenditure of approximately 6 percent. A 6 percent annual increase is considered typical for a wastewater treatment system of this type. Using a 6 percent increase equals approximately \$616,864 in OM&R expenditures in fiscal year 2019-20, which should be used in future budgeting.

***Existing Debt***

In 2017, the City consolidated debt in the sewer fund into two loans. The first loan has an annual debt service to the sewer fund of approximately \$50,128, which is scheduled to be paid off in fiscal year 2021-22. The second loan was for a land purchase (Oregon Pine Mill) that has an annual debt service to the sewer fund of \$29,217 per year. This loan is scheduled to be paid off during fiscal year 2045-46.

## Summary of State Funding Programs

### *Business Oregon Finance Programs*

#### **Community Development Block Grant Program**

The primary objective of the Community Development Block Grant (CDBG) program is the development of viable (livable) urban communities by expanding economic opportunities and providing decent housing and a suitable living environment principally for persons of low and moderate income.

This is a grant program. The state receives an annual allocation from the U.S. Department of Housing and Urban Development for the CDBG program. Grant funding is subject to the applicant need, availability of funds, and any other restrictions in the state's Method of Distribution (i.e., program guidelines). It is not possible to determine how much, if any, grant funds may be awarded prior to an analysis of the application and financial information.

Eligibility for the CDBG program requires a low to moderate percent income of greater than 51 percent. The City of John Day recently completed an income survey through Portland State University's Survey Research Lab, and the findings show that 57.3 percent of the residents are identified as low to moderate income. The income survey results will be valid until April 17, 2023. Therefore, the City of John Day qualifies for the for the CDBG program at this time.

#### **Water/Wastewater Financing Program**

This is a loan and grant program that provides for the design and construction of public infrastructure when needed to ensure compliance with the Safe Drinking Water Act or the Clean Water Act. To be eligible, a system must have received, or is likely to soon receive, a Notice of Non-Compliance by the appropriate regulatory agency associated with the Safe Drinking Water Act or the Clean Water Act.

While primarily a loan program, grants are available for municipalities that meet the eligibility criteria. The loan/grant amounts are determined by a financial analysis of the applicant's ability to afford a loan (debt capacity, repayment sources, current and projected utility rates, and other factors). One criteria utilized by Business Oregon finance programs is an affordability index rate. The affordability index rate is calculated by taking a City's median household income (MHI), multiplying it by 1.25 percent, and dividing by 12 months to obtain an estimated monthly cost. The calculated cost is assumed to be what the users in the community can afford to pay in utility charges. The affordability index is often utilized as a minimum threshold for eligibility for grants and low interest loans.

The maximum loan term for this program is usually 25 years or the useful life of the infrastructure financed, whichever is less. Loan amounts are determined by financial review and may be offered through a combination of direct and/or bond funded loans. Loans are generally repaid with utility revenues or voter approved bond issues. A limited tax general obligation pledge may also be required. "Creditworthy" applicants may be funded through the sale of state revenue bonds.

The maximum grant available through the Water/Wastewater Financing Program is \$750,000 per project based on a financial analysis. To qualify for grants, the sewer rate would need to be 115 percent of the City's affordability index rate. The City's current affordability index rate is \$34.66. The current interest rate is approximately 3.5 to 4 percent with a 25-year loan term. The Water/Wastewater program is a potential funding source for the City, though higher interest rates and a shorter loan term may substantially increase user rates if only Water/Wastewater financing is utilized.

### **Special Public Works Fund**

The Special Public Works Fund program was established by the Oregon Legislature in 1985 to provide primarily loan funding for municipally owned infrastructures and other facilities that support economic and community development in Oregon. Loans and grants are available to municipalities for planning, designing, purchasing, improving, and constructing municipally owned facilities.

For design and construction projects, loans are primarily available; however, grants are available for projects that will create and/or retain traded-sector jobs. A traded-sector industry sells its goods or services into nationally or internationally competitive markets. Loans range in size from less than \$100,000 to \$10 million. The Special Public Works Fund is able to offer very attractive interest rates that reflect tax-exempt market rates for very good quality creditors. Loan terms can be up to 25 years or the useful life of the project, whichever is less. Grants are limited to projects associated with job creation/retention. The maximum grant award is \$500,000 or 85 percent of the project cost, whichever is less. The grant amount per project is based on up to \$5,000 per eligible job created or retained. Since job creation or retention is a primary goal of the City's selected improvements project (via greenhouses and Innovation Gateway), the Special Public Works Fund may be a viable option for the City.

### **For Business Oregon Programs - Contact Regional Development Officer**

Since program eligibility and funds availability may change from year to year, potential applicants are encouraged to contact their respective regional development officer to obtain the most accurate and up-to-date information for each program.

### ***Clean Water State Revolving Fund Loan Program***

This program, administered by the Oregon Department of Environmental Quality (DEQ), provides low interest rate loans to public agencies for the planning, design, and construction of various projects that prevent or mitigate water pollution (e.g., WWTFs), as well as for some publicly owned estuary management and non-point source control projects. Priority in the agency's ranking process is always given to projects addressing documented water quality problems and health hazards.

Under the Clean Water State Revolving Loan Fund (CWSRF) program rules, interest rates change quarterly based on a percentage of the national municipal bond rate. These percentages vary from 25 to 55 percent of the bond rate depending on the length of the repayment period. In 2017, loans for design and construction for small communities had an interest rate that varied from 1 to 2 percent with repayment over 20 years, depending on the MHI and other factors. In addition, fees are assessed to cover program administration costs by the DEQ. A servicing fee of 0.5 percent of the

outstanding balance is added to the interest rate, and a loan reserve equal to 50 percent of the annual debt service is also to be set aside in a separate fund. This program typically provides approximately \$50 million annually for funding projects, with a maximum of 15 percent of the monies going to any one applicant. This program has low interest rates with variable repayment periods. This program has also recently implemented measures for principal forgiveness to be allocated to cities in combination with loans. The DEQ CWSRF program may be a low interest loan and potential principal forgiveness source for the City of John Day.

## **Summary of Federal Grant and Loan Programs**

### ***Rural Development***

Rural Development (RD) can provide financial assistance to communities with a population of less than 10,000 through both loans and direct grants. Under the loan program, the agency purchases local bonds. The interest rate for these bonds is dependent on the MHI of the community and other factors, and varies from year to year based on other economic factors nationally. The market interest rate varies but has recently been between approximately 2.5 and 3.5 percent with a repayment period of up to 40 years. Applying for this type of funding is a fairly lengthy process involving development of an environmental report and a detailed funding application.

RD presently requires communities to establish average residential user costs in the range of similar systems with similar demographics. According to RD staff, the most recent sewer user cost requirements have been approximately \$45 to \$50 per month before a community qualifies for grant funds. It should be noted that loans without grant funds may be acquired from RD that may not require rates to reach this level, depending on the results of an RD funding analysis. The user costs must provide sufficient revenue to pay for all system OM&R costs and pay for the local debt service incurred as a result of the project. All project costs above this level may be paid for by grant funds, up to given limits, which are typically in the 25 percent of total project cost range and usually not more than 45 percent of the total project cost. The objective of the RD loan/grant program is to keep the cost for utilities in small, rural communities at a level that is similar to what other communities are paying.

Another of the agency's requirements is that loan recipients establish a reserve fund of 10 percent of the bond repayment during the first 10 years of the project, which can make the net interest rate higher. The RD program requires either revenue or general obligation bonds be established through the agency for the project (refer to the Local Financing Options section of this chapter for further discussion). These bonds can usually be purchased for a period of 40 years if grant funding is also received. A loan from RD may be an option for the City to implement wastewater system improvements.

### ***U.S. Economic Development Administration***

The U.S. Economic Development Administration (EDA) has grants and loan funds similar to those available through Business Oregon's Special Public Works Fund program. Monies are available to public agencies to fund projects that stimulate the economy of an area, and the overall goal of the program is to create or retain jobs. The EDA helps fund public works improvement projects in areas where new industries are locating or plan to locate in the future. In addition, the agency has a program known as the Public Works Impact Program to fund projects in areas with extremely high

rates of unemployment. This program is targeted toward creating additional jobs and reducing the unemployment rate in the area.

## **Funding Summary**

Business Oregon's CDBG and Water/Wastewater program, the DEQ's CWSRF program, and RD appear to be the most attractive funding sources for the City's wastewater system improvements project. These programs appear to be funding sources that can provide the needed funds to potentially make the proposed improvements financially feasible for the City.

It is important for the City to consult with funding agencies early in the project development stages to understand which funding programs would provide the most attractive funding package for the proposed improvements. This consultation with funding agencies began during a First Stop meeting held at the City's Fire Station in November of 2017 facilitated by Rural Community Assistance Corporation. The agencies that attended included the DEQ, Business Oregon, and RD. Items of discussion during the First Stop meeting were the City's vision to turn its wastewater into an asset, potential permitting requirements, and potential funding sources. The next discussion on funding wastewater improvements will be done at a One Stop meeting, which is described in more detail later in this section. The remainder of this section focuses on evaluating loan capacities and funding options for the City's wastewater system improvements project, assuming the project is funded with only a loan and considering the programs' eligibility criteria described above.

It appears that more than one funding source is available to the City. However, most agencies require a sewer rate that will support a loan for wastewater system improvements, both as a condition of receiving monies and prior to being considered for grant funds. It should be noted that the monthly user rates discussed in this section can represent a combination of monthly usage fees and taxes.

It is important for the City to consult with funding agencies early in the project development stages to ascertain under which funding programs the City would be eligible to receive funding for their proposed improvements. This consultation with funding agencies may be done at a One Stop Meeting, which is described in more detail later in this chapter. The remainder of this chapter focuses on evaluating loan capacities and funding options for the City's wastewater system improvements project.

## **Preliminary Equivalent Residential Unit Analysis**

When projecting future revenue for a wastewater system, an Equivalent Residential Unit (ERU) analysis is usually completed. One ERU is intended to represent the average residential wastewater flow for a "typical" user. As an example, each residential connection in John Day would represent one ERU. A commercial or industrial connection user with wastewater flows similar to the average residential flow would also be considered one ERU. A commercial connection such as a café, with three times the typical wastewater flows as an average residential sewer connection, would be considered three ERUs.

The City's sewer service accounts, as of May 2018, were analyzed to provide a preliminary ERU determination. The following table summarizes the results of the preliminary ERU analysis.

**TABLE 6-4  
CITY OF JOHN DAY PRELIMINARY ERU ANALYSIS**

<b>Connection Type</b>	<b>Total Number of Connections</b>	<b>Estimated ERUs</b>
Residential (Single-Family Unit and Multi-Family Units)	559	559
Public	30	90
Commercial	138	306
Industrial	4	12
Government	12	36
<b>TOTAL</b>	<b>743</b>	<b>1,003</b>

Based on the ERU analysis above, the City of John Day has 743 sewer system connections that represent approximately 1,003 ERUs. Most funding agencies will use this type of ERU evaluation as a basis for estimating future yearly revenues and debt capabilities for a city. The ERU determination is intended to equitably distribute wastewater system costs among all users. The ERU determination helps funding agencies determine the maximum loan (debt) amount a city can incur prior to being considered for grant funds for their wastewater system project. The City of John Day will need both loan and grant funds to complete the wastewater system improvements project discussed in Chapter 5, should the City wish to do so. The analysis presented hereafter for the City's future sewer rate revenue and estimated loan capacity is based on the preliminary determination of 1,003 ERUs, not the current estimate of 743 connections.

### **Debt Capacity**

To determine the City's ability to fund a wastewater system improvements project, Figure 6-3 was prepared. Several assumptions were made:

1. Wastewater user revenue is based on the preliminary determination of 1,003 ERUs.
2. Wastewater system expenditures for the budget year 2019-20 were set at \$616,864 per year. The budget year 2019-20 was used because this is estimated to be the time period in which construction would be completed if the project is pursued immediately upon completion of this WWFP Update.
3. Future debt service was calculated based on a Water/Wastewater funding program loan with 4.0 percent interest for a 25-year repayment period, a CWSRF loan at 3.0 percent interest for a 20-year repayment period, and RD financing of 4.0 percent interest (at a lower poverty-based interest rate) for a 40-year repayment period, depending on which financing program is best suited to assist the City.
4. Figure 6-3 shows John Day's loan capacity and total loan capacity assuming Canyon City continues to follow the historic contribution of approximately 15 percent of the John Day's revenue. John Day's loan capacity is how much the City has factoring in the anticipated contributions from Canyon City. The total loan capacity shown on Figure 6-3 considers the combined John Day/Canyon City anticipated loan capacity with 85 percent of monies coming from John Day and 15 percent coming from Canyon City.



5. It is important to note the estimated loan capacities shown on Figure 6-3 are based on the current estimate of 1,003 ERUs. These figures may need to be verified as project funding proceeds. It should be recognized that this is only a preliminary analysis, and the financial assumptions and figures presented in this WWFP Update should be refined as project implementation proceeds in the future and as agreements are made with funding agencies.

The data shown on Figure 6-3 provides a general idea of the amount of debt the City could service at various monthly wastewater costs. The total project cost of the selected wastewater improvements is estimated to be \$10,330,000 (see Chapter 5). Assuming Canyon City pays 15 percent of the capital cost, John Day's portion of the project would cost approximately \$8,780,500. As shown on Figure 6-3, a wastewater rate of \$70 per month would fund only a portion of the project with a loan. Given that the current sewer rate is \$46 per month, a \$24 per month rate hike is not feasible. Therefore, it is important for the City to pursue potential grant funds or loan forgiveness to assist with project financing.

## **Project Funding Options**

Based on the estimated cost of the John Day wastewater system improvements project, the City will need to obtain a low interest loan coupled with a grant, if available, to fund the desired improvements project. As an improvements project is pursued, it is recommended that the City thoroughly investigate potential funding sources to ensure the best funding package is obtained for the project.

### ***One Stop Meeting and Project Intake Form***

The Business Oregon One Stop meeting process allows the City to develop various funding scenarios. In the past, the City of John Day would have needed to schedule a One Stop meeting in Salem, where representatives of major funding agencies would have met with the City to discuss the project and funding needs and identify the funding program best suited for the project. To avoid requiring City representatives to travel to Salem, Business Oregon has the option to schedule One Stop meetings in the area of the project or can complete these meetings via conference call and a web computer connection to visually demonstrate funding scenarios.

The City needs to attend a One Stop meeting. At the meeting, various funding scenarios will be explored with Business Oregon, the DEQ, and RD. The meeting will provide the City with financial information needed to make an informed decision on selecting a funding source or sources for the proposed improvements.

## **Local Financing**

Regardless of the ultimate project scope and agency from which loan and grant funds are obtained, the City may need to develop authorization to incur debt (i.e., bonding) for the needed project improvements. The need to develop authorization to incur debt depends on funding agency requirements and provisions in the City Charter. RD requires a city to obtain authorization to incur debt.

There are generally two options a city may use for its bonding authority: general obligation bonds and revenue bonds. General obligation bonds require a vote of the people to give the City the authority to repay the debt service through tax assessments, wastewater rate revenues, or a combination of both. The taxing authority of the City provides the guarantee for the debt. Revenue bonds are financed through revenues of the wastewater system. Authority to issue revenue bonds can come in two forms.

One would be through a local bond election similar to that needed to sell a general obligation bond, and the second would be through City Council action authorizing the sale of revenue bonds if the City Charter allows. If citizens do not object to the bonding authority resolution during a 60-day remonstrance period, the City would have authority to sell these revenue bonds.

The RD program accepts either revenue bonds or general obligation bonds. Bonding is not required for the Business Oregon and CWSRF programs. Due to current tax measure limitations in the state of Oregon, careful consultation with experienced, licensed bonding attorneys needs to be made if the City of John Day begins the process of obtaining bonding authority for the proposed wastewater system improvements. It would be wise for the City to consult their City Charter and attorney to see if debt for the wastewater system can be assumed.

## Project Implementation

The following action items and implementation steps need to be made by the City of John Day if they desire to implement a wastewater system improvements project. The steps outlined are general in nature and include the major steps that need to be undertaken.

### *Action Items*

1. Formally adopt the WWFP Update.
2. Consult with funding agencies to ensure the best funding package is obtained for the project.
3. Prepare funding applications for the wastewater system improvements project.
4. Decide how to obtain the authorization to incur debt for the wastewater system improvements project. Once decided (revenue bond or general obligation bond), a bond attorney should be consulted and the appropriate resolution paperwork should be prepared and considered for implementation.
5. Hold public information meetings to inform its citizens of the needs and scope of the project, to answer questions, and to generate support for a potential sewer rate increase.

## Implementation Steps

Should the City wish to proceed with a wastewater system improvements project, the following Implementation Plan outlines the key steps the City would need to undertake to proceed with project implementation.

	ITEM	COMPLETION DATE
1.	Initiate funding discussions with funding agencies.	June 2018
2.	Adopt the WWFP Update.	August 2018
3.	Consult with funding agencies as necessary and complete and submit the applications as necessary.	August 2018
4.	File with County Clerk for November election if election for a revenue bond or general obligation bond is desired.	September 2018
5.	Hold public information meetings.	September 2018

6.	Hold bond election (if election desired/required).	November 2018
7.	Finalize project funding.	Winter 2018-19
8.	Initiate design.	Winter 2018-19
9.	Complete project design.	Summer 2019
10.	Bid and award construction contract.	Fall 2019
11.	Start project construction.	Winter 2019-20
12.	Complete project construction.	Summer 2020
13.	Close out project.	Fall 2020

The key to implementing part or all of the John Day wastewater system improvements project, as outlined in this chapter, is the ability of the City to acquire a low-interest loan coupled with grant funding. The City will have to work closely with its citizens to inform them of the system needs and the necessity for increased sewer user costs. Depending on the scope of improvements, the City will need to plan on average user costs being increased to at least \$50 to \$70 per month, or annual property taxes increasing by approximately \$6 to \$8 per \$1,000 of tax assessed value (or some combination of the two), to obtain the loan and grant funds required to complete the project. Rates may be higher than this depending on the amount of grant funds available. Participation from Canyon City is vital for the City of John Day to be able to fund the selected alternative discussed in Chapter 5.

Wastewater system improvements as outlined in this WWFP Update will provide the City with a reliable, quality wastewater system that will meet the needs of the City for many years to come. The new system will be easier to operate, will be able to provide nitrate treatment, and will also require less maintenance.

CITY OF JOHN DAY, OREGON  
 HISTORICAL SEWER AND JOINT SEWER FUND SUMMARY  
 FISCAL YEARS 2011 THROUGH 2017

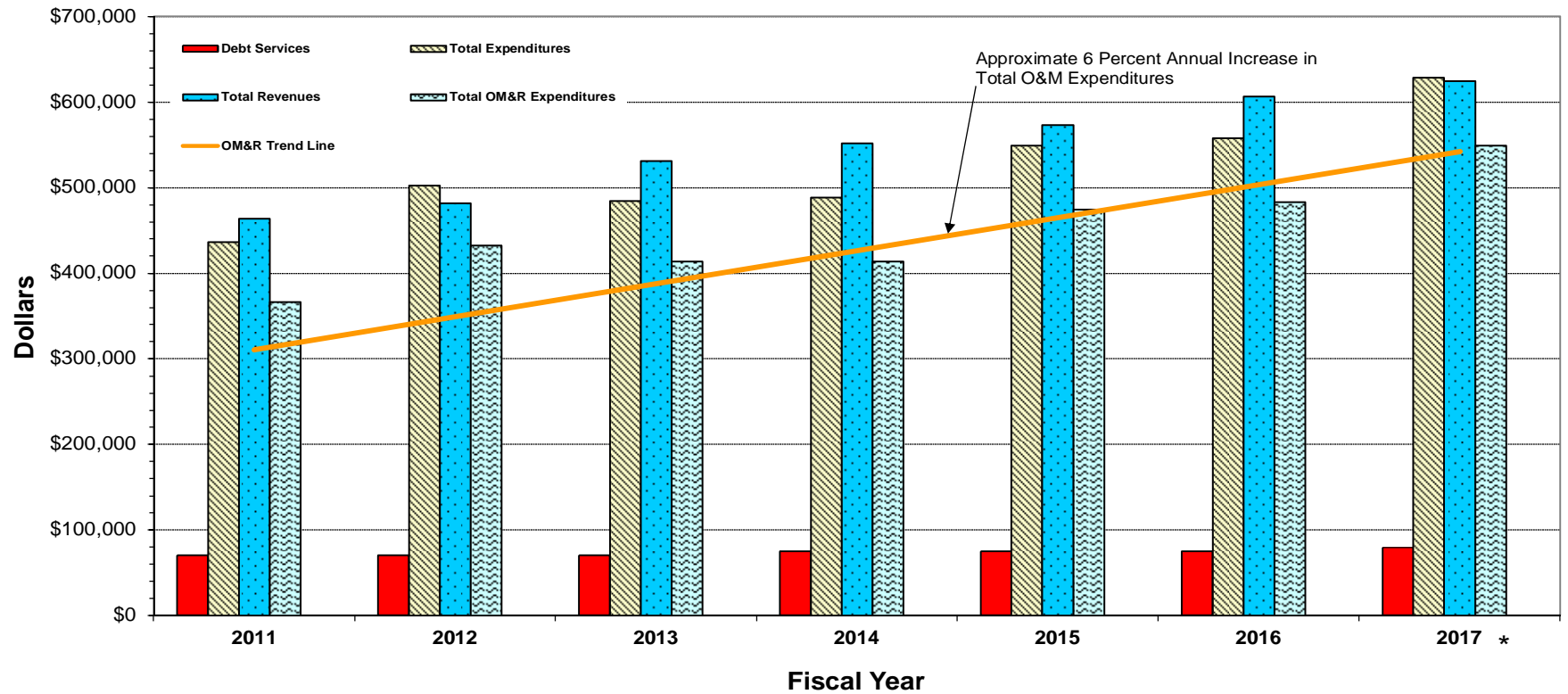
Fiscal Year	Operating Revenue	From Canyon City	Non-Operating Revenue	Transfers to Reserve	Materials and Services	Capital Outlay (Equipment)	Personnel Services	Motor Pool	Employee Benefits	Total OM&R Expenditures	Debt Services	Total Expenditures	Net Income Gain/(Loss)
2011	\$439,079	\$24,199	\$359	\$38,395	\$110,623	\$0	\$145,763	\$0	\$71,459	\$366,240	\$70,155	\$436,395	\$ 27,242
2012	\$432,585	\$48,973	\$250	\$36,550	\$118,864	\$0	\$156,766	\$40,000	\$79,958	\$432,138	\$70,155	\$502,293	\$ (20,485)
2013	\$471,159	\$59,995	\$228	\$13,707	\$129,139	\$926	\$146,785	\$40,000	\$83,182	\$413,739	\$70,155	\$483,894	\$ 47,488
2014	\$486,820	\$64,789	\$373	\$40,322	\$127,911	\$0	\$130,396	\$40,000	\$74,543	\$413,172	\$74,755	\$487,927	\$ 64,055
2015	\$520,674	\$52,160	\$3,153	\$40,282	\$145,321	\$10,178	\$148,133	\$45,000	\$85,294	\$474,208	\$74,755	\$548,963	\$ 27,024
2016	\$547,102	\$59,002	\$865	\$31,710	\$152,118	\$0	\$170,088	\$45,000	\$83,981	\$482,897	\$74,754	\$557,651	\$ 49,318
2017	\$624,038	\$0	\$1,290	\$66,950	\$167,941	\$0	\$176,929	\$45,000	\$92,187	\$549,007	\$79,354	\$628,361	\$ (3,033)



CITY OF  
 JOHN DAY, OREGON  
 WASTEWATER FACILITIES PLAN UPDATE  
 HISTORICAL SEWER AND JOINT  
 SEWER DEPARTMENT FUNDS

**FIGURE  
 6-1**

### City of John Day, Oregon Historical Sewer and Joint Sewer Department Funds



**CITY OF JOHN DAY, OREGON  
PRELIMINARY WASTEWATER RATE ANALYSIS FOR LOAN CAPACITY  
2019-20 BUDGET YEAR**

RATE <sup>1</sup>		REVENUE		EXPENDITURES			FINANCING OPTIONS		
Meter Charge (per month)	Total ERU	Canyon City Revenue <sup>2</sup>	Total Revenue <sup>3</sup>	Estimated OM&R Costs <sup>4</sup>	Existing Debt Service <sup>5</sup>	Revenue Available for Future Debt Service <sup>6</sup>	RD Loan Capacity <sup>7</sup>	Typical Business Oregon Loan Capacity <sup>8</sup>	CWSRF Disadvantaged Community Capacity <sup>9</sup>
\$ 46.00	1,003	\$ 92,530	\$ 646,186	\$ 616,864	\$ 83,817	-	-	-	-
47.00	1,003	92,530	658,222	616,864	83,817	-	-	-	-
48.00	1,003	92,530	670,258	616,864	83,817	-	-	-	-
49.00	1,003	92,530	682,294	616,864	83,817	-	-	-	-
50.00	1,003	92,530	694,330	616,864	83,817	-	-	-	-
51.00	1,003	92,530	706,366	616,864	83,817	\$ 5,684	\$ 101,000	\$ 77,000	\$ 85,000
52.00	1,003	92,530	718,402	616,864	83,817	17,720	316,000	241,000	264,000
53.00	1,003	92,530	730,438	616,864	83,817	29,756	530,000	404,000	443,000
54.00	1,003	92,530	742,474	616,864	83,817	41,792	744,000	568,000	622,000
55.00	1,003	92,530	754,510	616,864	83,817	53,828	959,000	732,000	801,000
56.00	1,003	92,530	766,546	616,864	83,817	65,864	1,173,000	895,000	980,000
57.00	1,003	92,530	778,582	616,864	83,817	77,900	1,388,000	1,059,000	1,159,000
58.00	1,003	92,530	790,618	616,864	83,817	89,936	1,602,000	1,222,000	1,338,000
59.00	1,003	92,530	802,654	616,864	83,817	101,972	1,816,000	1,386,000	1,517,000
60.00	1,003	92,530	814,690	616,864	83,817	114,008	2,031,000	1,549,000	1,696,000
61.00	1,003	92,530	826,726	616,864	83,817	126,044	2,245,000	1,713,000	1,875,000
62.00	1,003	92,530	838,762	616,864	83,817	138,080	2,460,000	1,877,000	2,054,000
63.00	1,003	92,530	850,798	616,864	83,817	150,116	2,674,000	2,040,000	2,233,000
64.00	1,003	92,530	862,834	616,864	83,817	162,152	2,888,000	2,204,000	2,412,000
65.00	1,003	92,530	874,870	616,864	83,817	174,188	3,103,000	2,367,000	2,591,000
66.00	1,003	92,530	886,906	616,864	83,817	186,224	3,317,000	2,531,000	2,771,000
67.00	1,003	92,530	898,942	616,864	83,817	198,260	3,532,000	2,694,000	2,950,000
68.00	1,003	92,530	910,978	616,864	83,817	210,296	3,746,000	2,858,000	3,129,000
69.00	1,003	92,530	923,014	616,864	83,817	222,332	3,961,000	3,022,000	3,308,000
70.00	1,003	92,530	935,050	616,864	83,817	234,368	4,175,000	3,185,000	3,487,000

CWSRF = Clean Water State Revolving Fund  
 ERU = equivalent residential units  
 OM&R = operation, maintenance, and replacement  
 RD = Rural Development

**Notes:**

- <sup>1</sup> The current residential base wastewater rate is \$46.00 per month per ERU. Commercial accounts have been estimated as 2.2 ERUs. Actual commercial income will vary.
- <sup>2</sup> Estimated revenue from Canyon City using a historical contribution trend of 15 percent coming from Canyon City.
- <sup>3</sup> Revenue is based on the 2016-17 fiscal year number of wastewater ERUs.
- <sup>4</sup> Estimated OM&R cost for the 2019-20 budget year.
- <sup>5</sup> See Chapter 7 for further discussion.
- <sup>6</sup> Revenue available for future debt service = total revenue - estimated OM&R costs - existing debt service.
- <sup>7</sup> Assumes loan funding at 4 percent for 40 years (loan capacity determined after 10 percent reserve payment removed from revenue available for debt service). Values rounded to nearest \$1,000.
- <sup>8</sup> Assumes loan funding at 4 percent for 20 years. Values rounded to the nearest \$1,000.
- <sup>9</sup> Assumes loan funding at 3 percent for 20 years. Values rounded to the nearest \$1,000.