CHAPTER 12 - FINANCIAL PLAN

This chapter documents existing financial conditions and summarizes user rate and connection fee recommendations. To maintain existing infrastructure and pay for needed improvements, the City will have to increase sewer rates. Assumptions for increases in operating revenues and expenditures are addressed in this chapter. Recommendations to update the connection fees and a discussion of potential financing options are also summarized in this chapter.

12.1 FINANCIAL HISTORY

Table 12.1 shows a summary of operating activities for fiscal year (FY) 2007 through FY 2011. Anticipated operating income and expenses were also estimated for FY 2012 (based on 9 months of data available at the time the analysis was completed). Operating expenses began to increase substantially from FY 2007 to FY 2009 as the new plant came on-line and as additional industrial development occurred. In FY 2011, operating revenues were $627,484 less than operating expenses. Efforts to correct this large operating deficit have been helpful, but the anticipated deficit for FY 2012 is still about $237,000.

TABLE 12.1 – FINANCIAL HISTORY, OPERATING ACTIVITIES

			Fiscal Year			
FY ending Sept 30	2007	2008	2009	2010	2011	2012 (Approx.)
CASH FLOWS FROM OPERTING ACTIVITIES						
Revenues						
Residential/Commercial Customer Receipts	$ 956,887	$ 974,343	$ 815,078	$ 1,025,456	$ 1,071,243	$ 1,110,111
Largest 5 Industry Receipts	$ 1,164,189	$ 1,320,055	$ 1,836,691	$ 1,727,056	$ 1,710,915	$ 1,841,018
Miscellaneous (septage, late fees, etc.)	$ 6,025	$ 13,550	$ 17,836	$ 13,846	$ 43,688	$ 43,856
Interest	$ 562,359	$ 179,776	$ 41,029	$ 11,908	$ 1,207	$ 2,333
Industry Penalties	$ 1,000	$ -	$ 164,042	$ 95,562	$ 60,763	$ 27,517
Total Revenues	$ 2,690,461	$ 2,487,724	$ 2,874,676	$ 2,873,829	$ 2,887,816	$ 3,024,835
Expenditures						
Salaries and Benefits	$ 625,827	$ 854,962	$ 888,076	$ 916,160	$ 1,107,665	$ 1,148,734
Materials & Services	$ 476,827	$ 636,711	$ 1,236,193	$ 1,158,924	$ 1,570,724	$ 1,311,700
Debt Service	$ 685,312	$ 684,588	$ 687,707	$ 685,187	$ 687,306	$ 683,706
Repairs & Maintenance	$ 42,580	$ 53,218	$ 89,112	$ 95,195	$ 149,605	$ 117,715
Total Expenditures	$ 1,830,546	$ 2,229,479	$ 2,901,087	$ 2,855,466	$ 3,515,301	$ 3,261,855
Total Annual Operations Surplus / Deficit	**$ 859,914**	**$ 258,245**	**$ (26,411)**	**$ 18,363**	**$ (627,484)**	**$ (237,020)**

Operating activities include revenues from sewer rates and expenditures for recurring costs such as personnel, materials and services, and repair and maintenance. Revenues increase due to economic growth and rate increases. Expenditures increase due to additions in staff and the escalating cost of labor, benefits, services, materials and supplies.

12.2 ESTABLISHING FISCAL YEAR 2013 BUDGET

In developing a recommended budget for fiscal year 2013 (FY 2013), Keller Associates reviewed the financial history, completed a staffing analysis (refer to Chapter 10 of this report), and reviewed the City's replacement needs.

12.2.1 Salaries and Benefits

The City of Jerome provided anticipated FY 2013 salaries and benefits for employees. For those employees whose responsibilities are divided between wastewater and other activities, the City provided input on the portion of time allocated to the wastewater fund (see Table F.1 in Appendix F). For FY 2013, two new employees were added. These include a pre-treatment coordinator and lab technician.

12.2.2 Materials and Services

Keller Associates also reviewed each line item of the projected FY 2013 budget with City staff. The materials and services budget includes modest increases in some expenses, and includes an increased budget for professional services to assist in EPA compliance activities.

12.2.3 Repairs and Maintenance

Keller Associates is recommending an $860,000 increase in the repairs and maintenance budget. This budget includes $200,000 per year for collection system replacement and repairs (previously not funded), and the establishment of a short-lived assets replacement fund, which includes repairs of major equipment and materials (refer to Appendix F, Table F.2 for a list of short-lived assets, replacement costs, and annual recommended budget amounts).

In recent years, short-lived assets and replacement budgets have largely gone unfunded. This budget is critical to ensure that sustainability of the City's wastewater system. As an example, the City should be setting aside approximately $314,000 per year for membrane replacement. Failing to set aside these funds will put the City in a position where they will not have funds to replace the membranes when they reach the end of their useful life.

12.3 COST OF SERVICE AND RATE STRUCTURE EVALUATION FOR FY 2013

As part of the rate analysis for Jerome, Keller Associates looked at the cost of service for the wastewater utility. The process involved the steps below. Using this process, rate impacts were estimated to balance the FY 2013 budget and to pay for additional anticipated debt needed to fund priority project improvements.

- Allocating plant capital costs to flow, BOD, TSS, and phosphorous
- Estimating the Equivalent Residential Units (ERUs) for all non-residential units
- Allocating operating costs into two general categories – fixed costs and variable costs. Then allocate the portion of operating costs that are variable to flow, BOD, TSS, and phosphorous.
- Calculating the portion of costs allocated to the largest industrial users versus the remaining users.
- Estimating the user rate impacts for various types of users. For the domestic users, this includes looking at alternative rate structures.

12.3.1 Allocation of Plant Capital Costs

Keller Associates reviewed a 2004 facilities valuation report and capital expenses since 2004 to develop a current system replacement value. This replacement value was allocated to various facility components including the collection system, headworks facilities, bio-towers, aeration basins, membrane facilities, ultraviolet light, solids handling facilities, yard piping, and blower building. For each facility, the costs were then allocated to flow, BOD, TSS, and phosphorous based in the sizing criteria for the facility. The values and allocations are illustrated in Table F.3 of Appendix F. The analysis for the existing system resulted in the following allocations, or weighting factors:

TABLE 12.2 – EXISTING WEIGHTING FACTORS

Flow	BOD	TSS	Phosphorous
61.6%	30.6%	5.7%	2.1%

12.3.2 Estimating Equivalent Dwelling Units (ERUs)

The Equivalent Residential Units (ERUs) were calculated for every user in the system. For the majority of the commercial accounts, the ERUs were determined based on water meter size and the waste strength category in the City's billing system. A user with a 0.75-inch water meter and Sewer Class 1 equates to a single ERU. A 1.5-inch meter has four times the area and capacity of a 0.75-inch, and therefore would have an ERU equivalency of 4 for a Sewer Class 1 user. For users with higher waste strength, the impact to the plant is higher and so the calculated ERU is higher. Table F.4 in Appendix F shows the waste strength multipliers and the estimated ERUs for the domestic users. For the City of Jerome, the domestic accounts made up approximately 3612 accounts which equated to approximately 4613 ERUs.

For the largest two commercial accounts (Rite Stuff and Commercial Creamery), the ERU was calculated using the weighting factors developed above and available flow, BOD, TSS, and phosphorous data for the facilities. For the largest three industries, peak discharges (or permit limits) were compared to domestic peak day discharges to establish a residential equivalency (see Table F.5 in Appendix F for calculations).

12.3.3 Allocation of Operating Costs

Every operating budget line item expense was evaluated in terms of whether the cost was a fixed cost (meaning it was a cost incurred regardless of how much a customer discharges) or a variable cost (meaning the cost could be directly linked to wastewater flow volume and/or wastewater strength).

For each fixed cost, Keller Associates evaluated how the cost should be distributed among the various users. Considerations were given to the size of the account, flows, and waste strength. The majority of the fixed costs were allocated to industry and domestic users based on the ERUs. A discount was given to the industries for collection system expenses. This is because the domestic users, which account for a smaller portion of the flow, require much more piping to serve than the industries.

Variable costs include power, chemicals, solids hauling, and other costs that are assumed to vary depending on the amount of flow or waste strength. The majority of these costs were allocated to flow, BOD, TSS, and phosphorous based on the weighting factors developed above. However, some costs were allocated to flow, and power and chemical costs were calculated based on chemical budgets and horsepower, respectively. For a detailed breakdown of the costs and how they were allocated, refer to Tables F.6 and F.7 in Appendix F.

12.3.4 Calculating Industrial and Domestic Target Revenues

Using the allocation of fixed and variable costs, the recommended FY 2013 target revenues were developed for the industrial and domestic users. A comparison of anticipated FY 2012 revenues to target revenues for each of the major user categories is summarized in Table 12.3 below.

TABLE 12.3 – FY 2012 VERSUS FY 2013 TARGET REVENUES

User Type	Revenue Based on Aug 2011 Rates	Revenue Based on Proposed FY 2013 Rates
Residential*	$ 824,000	$ 1,221,000
% of Total	*28%*	*27%*
Commercial**	$ 286,000	$ 459,000
% of Total	*10%*	*10%*
Largest 3 Industries (JC, DG, and IMP)	$ 1,695,000	$ 2,602,000
% of Total	*57%*	*58%*
Commercial Creamery and Rite Stuff Foods	$ 134,000	$ 194,000
% of Total	*4%*	*4%*
Misc (Septic Disposal)	$ 44,000	$ 44,000
% of Total	*1.5%*	*1%*
Total	$ 2,983,000	$ 4,520,000

*Includes Sewer Class 1, 3/4" meters
**Includes Sewer Class 1(1+" meters), and Sewer Class 2 and 3

12.3.5 Estimating User Rate Impacts

In estimating the user rate impacts for the largest three industries, Keller Associates applied the fixed cost per ERU and the calculated variable costs for each of the industries (Refer to Tables F.6 and F.8 in Appendix F).

For the domestic users, various rate structures were considered. Based on the cost of service analysis completed by Keller Associates, the City could have elected to substantially increase base rates and even lowered some of the commodity (or usage) fees. In an effort to encourage conservation, more uniformly distribute rate increases, and minimize the impact to those on fixed incomes who used little water, the City elected to only make changes in the base fee for FY 2013 rate schedule. This base rate will increase from $4.83 per account to $14.95 per ERU, where the ERU is determined based on the meter size and the waste strength.

12.4 FINANCIAL FORECAST

Table 12.4 shows the anticipated revenues and expenses for FY 2013 through FY 2018. Revenue increases in FY 2013 are intended to correct existing budget deficits and fully fund replacement budgets. Increases in FY 2014 and FY 2015 are primarily intended to cover additional debt service and operating and maintenance costs associated with needed capital improvements. In order to cover future expenses, additional rate increases will be needed.

12.4.1 Operating Expenditures

Operating Expenditures are forecast to increase due to inflation, new employees, and new materials and services costs.

Salaries and Benefits

Salaries and benefits are forecast to increase at the rate of 4% per year due to inflation. In addition to inflation costs, five additional employees are anticipated to be added. Two employees are assumed to be added in FY 2013, one additional employee in 2014, and two employees in 2015.

Materials & Services

Materials & services are anticipated to increase 14% in FY 2013 to accommodate some urgent items intended to address EPA's consent order, followed by a 7% decrease in FY 2014 (fewer professional services), and an additional 14% decrease in FY 2015 (largely attributed to cost savings anticipated with the discontinuation of hauling solids to Milner Butte Landfill). For FY 2016 and beyond, the forecasted expenses increase at 4% per year to reflect inflation.

Repairs & Maintenance

In recent years, the City of Jerome has not funded repairs and maintenance budgets. The total repairs and maintenance budget was established for FY 2013 at about $975,000. It is anticipated that this cost jump to $1,384,000 in FY 2015 as new facilities are brought on-line and will increase at a rate of 4% per year in future years as a result of inflation.

Debt Service

Debt service is anticipated to increase as new bond(s) are issued to finance needed improvements. Multiple financing scenarios were considered during the planning process. For the forecast shown in Table 12.4, it was assumed that approximately $43,000,000 of improvements would be financed through the state bond bank similar to the last treatment plant upgrade. In an effort to minimize rate impacts, it was assumed that the existing debt would be wrapped into the new loan. If the City is successful in securing low interest loans and grants from USDA-RD and low interest loans from DEQ, then actual annual debt obligations could be reduced slightly.

It should be noted that the City has also considered smaller projects, including a $33,000,000 project as well as a larger $57,000,000 project. The rate impacts associated with different bond amounts will be discussed later.

TABLE 12.4 - FINANCIAL FORECAST

	Fiscal Year						
FY ending Sept 30	2012	2013	2014	2015	2016	2017	2018
CASH FLOWS FROM OPERTING ACTIVITIES							
Revenues							
Average Domestic Rate Increases		51%	40%	9%	3%	3%	3%
Residential/Commercial Customer Receipts	$ 1,110,111	$ 1,679,428	$ 2,355,915	$ 2,558,861	$ 2,675,161	$ 2,796,747	$ 2,923,859
Largest 5 Industry Receipts	$ 1,841,018	$ 2,795,598	$ 3,723,869	$ 3,992,846	$ 4,174,321	$ 4,364,044	$ 4,562,390
Miscellaneous (septage, late fees, etc.)	$ 43,856	$ 43,856	$ 43,856	$ 43,856	$ 43,856	$ 43,856	$ 43,856
Interest	$ 2,333	$ -	$ 40,000	$ 40,000			
Industry Penalties	$ 27,517	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenues	$ 3,024,835	$ 4,518,883	$ 6,163,640	$ 6,635,563	$ 6,893,338	$ 7,204,647	$ 7,530,105
Expenditures							
Salaries and Benefits	$ 1,148,734	$ 1,367,316	$ 1,463,415	$ 1,702,074	$ 1,770,157	$ 1,840,963	$ 1,914,602
Materials & Services	$ 1,311,700	$ 1,497,332	$ 1,402,265	$ 1,226,893	$ 1,275,969	$ 1,327,008	$ 1,380,088
Existing Debt Service	$ 683,706	$ 682,000					
New and Refinanced Debt - $43 Million New (30 year term) - two separate issues			$ 1,433,782	$ 2,185,564	$ 2,185,564	$ 2,185,564	$ 2,185,564
Repairs & Maintenance	$ 117,715	$ 975,272	$ 1,014,283	$ 1,383,854	$ 1,439,208	$ 1,496,776	$ 1,556,647
Total Expenditures	$ 3,261,855	$ 4,521,920	$ 5,313,745	$ 6,498,386	$ 6,670,899	$ 6,850,312	$ 7,036,902
Total Annual Operations Surplus / Deficit	**$ (237,020)**	**$ (3,037)**	**$ 849,895**	**$ 137,177**	**$ 222,439**	**$ 354,335**	**$ 493,203**

Impacts of Snake River Discharge

In the event that the City were to relocate their outfall from the current location to the Snake River, then there would be an increase in debt service, operating expenses (for pumping and cooling the water), and maintenance and replacement expenses associated with new facilities. **These expenses would be in addition to those shown in Table 12.4 and would equate to more than a million dollars per year.**

12.4.2 Operating Revenues

Customer Receipts

Operating revenues were assumed to increase based on projected rate increases and an estimated growth rate of 1.5% per year beginning in 2015. This growth rate is more conservative than the growth rates assumed for planning purposes. However, it should be noted that conservation measures or pre-treatment efforts by large industries could actually result in a decrease in operating revenues.

Any connection fees gathered during the six year forecast were assumed to pay down debt, pay for Priority 2 improvements, and/or establish a healthier budget reserve.

Cash Flows from Investing Activities

The City invests idle cash in interest bearing securities. These revenues from interest fluctuate with cash balances and the rate of return on the investments. In forecasting future interest, an estimated $80,000 of interest income (spread out over two fiscal years) was assumed to result from bond financing via the state bond bank.

12.4.3 Reserves

As of October 1, 2012 the City is anticipated to have essentially a zero balance in the sewer fund. Keller Associates recommends that a minimum reserve balance of no less than $500,000 to $1,000,000 be established using funds set aside for repairs and maintenance, and that this fund balance be maintained. This reserve can be partially established by dedicating additional revenues set aside for repairs and maintenance. Additionally, Keller Associates shows a budget surplus in 2014 resulting from an additional rate increase in FY 2014. Depending on the sources of debt financing, this fund balance may need to increase to provide the necessary assurances that investors and loaning agencies need.

12.5 USER RATE IMPACTS

Keller Associates developed a user rate model that projected rate impacts for every customer. Various user rate structures were reviewed with City staff and elected officials in an effort to equitably allocate costs. Table 12.5 shows the sewer rates and forecast rate increase for the domestic users assuming a $33,000,000 bond amount. A similar analysis was completed for the industrial users.

Each year the City should evaluate the utility's financial performance during the previous year and decide whether to follow or modify the planned rate increases. Changes in the construction schedule, financing costs, operating costs, or revenues from rates and connection fees may require the City to modify the planned rate increases. For example, economic growth that exceeds the forecast growth rate will result in increased revenue from both connection fees and rates, which will allow for a decrease in the sewer rate adjustment. Alternatively, if costs escalate faster than forecast, there may be a need to increase rates more rapidly.

Additionally, it should be noted that the 2014 increase assumes that the full debt payment is required beginning in FY 2014. This would be the case if the City were to do a single issue of bonds, similar to how the existing wastewater debt was incurred. However, if the City is able to finance the project such that the debt could be taken out over multiple years, it may be possible to spread to avoid another jump in user rates in 2014, spreading this cost out over 2 to 3 years.

TABLE 12.5 – DOMESTIC SEWER RATES & FORECAST RATE INCREASES ($33M Bond Scenario)

Customer Class	FY 2012 Rates	2013 (adopted)	2014	2015	2016	2017	2018
Class 1: Residential, Low Wastewater Strength Commercial/Industrial							
Base (per ERU)*	4.83	14.95	27.95	31.85	32.81	33.79	34.8
Commodity (Usage)**	2.80	2.80	2.80	2.80	2.88	2.97	3.06
Typical Residential User Rate ***	***21.07***	***31.19***	***44.19***	***48.09***	***49.53***	***51.02***	***52.50***
% Increase (per year)		49%	42%	9%	3%	3%	3%
Class 2: Medium-Low Strength Commercial/Industrial							
Base (per ERU)*	4.83	18.69	34.94	39.81	41.00	42.24	43.50
Commodity (Usage)**	4.23	4.23	4.23	4.23	4.36	4.49	4.62
Class 3: Medium Wastewater Strength Commercial/Industrial							
Base (per ERU)*	4.83	22.43	41.93	47.78	49.21	50.68	52.21
Commodity (Usage)**	5.65	5.65	5.65	5.65	5.82	5.99	6.17

*ERU = Equivalent Residential Unit and is based on a ¾ - inch water meter
** Usage fee per 100 cubic feet
***Assumes 580 cubic feet of water usage per month

Impacts of Higher Bond Amount

Should the City choose to bond for a higher amount, the rate impacts would be more pronounced. This is particularly true in the event that the only the residential clients were to pay for the added cost to accommodate growth. Based on discussions with existing industries, the City would likely meet significant resistance from the existing industries should the plant be substantially oversized to accommodate new (and potentially competing) industries. Should the City bond for $58,000,000 in improvements and place the debt repayment obligation on the existing residential users, Keller Associates would estimate that the typical residential user rate would increase by approximately $28/month. If the existing industries or new industries paid a portion of the new debt service, this amount could be reduced.

Impacts from Potential Loss of Industry

Keller Associates also considered the rate impacts of losing a major industry. If the City's largest industry were to no longer discharge wastewater to the City's system,

then there are many fixed costs that would have to be distributed over the remaining users. Keller Associates did a preliminary estimate of these costs and determined that the typical residential user would likely see an increase of about $13/month.

12.6 FINANCING

There are many potential financing sources available to the City of Jerome for the purpose of financing wastewater improvements. For projects in excess of $10M to $20M in the state of Idaho, the two most likely sources of funding are the private bond market and the Idaho state bond bank. Other sources of funding could include Department of Commerce grants (typically less than $500,000, tied to growth, and very competitive), US Department of Agriculture, Rural Development (USDA-RD) loans and grants (with a likely maximum amount available of $8 million spread out over 2 years, and a possibility of about 25% grant funding), and Department of Environmental Quality (DEQ) low interest loans.

To date, the City has been working with USDA-RD and DEQ in an effort to maximum the amount of low interest loans and grants. That portion of funding that cannot be financed with USDA-RD and DEQ is anticipated to be funded through the state bond bank.

12.7 CONNECTION FEES

Keller Associates developed recommended connection fees for the wastewater system. The connection fee is comprised of two elements – a reimbursement fee and an improvement fee. The reimbursement fee is calculated using the present value available capacity for each facility. Those facilities without any remaining capacity do not benefit growth and therefore do not factor into the reimbursement fee. The second component of the connection fee is the improvement fee. This fee was developed based on the 2015 recommended improvement project list and considers the portion of each improvement that benefits growth. Refer to Table F.9 in Appendix F for additional information on connection fee calculations.

For a typical residential connection, the recommended connection fee is $3,151 ($703 reimbursement plus $2,448 for improvement component). For future industrial connections, Keller Associates recommends that the connection fee be calculated based on the permit limits and the following formula, as shown in the following table:

Connection Fee = $2.87*(gallons per day)
+ $503*(BOD lbs/day)
+ $481*(TSS lbs/day)
+ $735*(Phosphorous lbs/day)

	Flow (gpd)	BOD (lb/day)	TSS (lb/day)	Phos (lb/day)
Present Value Benefitting 2032 Growth	$1.40	$33.00	-	-
2015 Project Benefitting 2032 Growth	$1.47	$470.00	$481.00	$735.00
Total:	**$2.87**	**$503.00**	**$481.00**	**$735.00**

12.8 RECOMMENDATIONS

Keller Associates recommends that the City proceed with user rate increases necessary to balance FY 2013 budgets and provide for the necessary revenue to meet future needs. This will require additional rate increases in FY 2014 and FY

2015, followed by modest inflationary increases in the future. Keller Associates also recommends that the City proceed with recommended connection fee increases. Additionally, rate increases should be closely coordinated with industries.

In implementing future rate increases, the City should review annually the financial status of the wastewater utility. In the event that future improvements are required to meet new regulations, the City may need to update the connection fee and user rates accordingly. For example, if the City were to relocate their discharge to the Snake River, then the user rate schedule could be updated to allocate debt service and operations and maintenance costs associated with cooling equipment to users based on their thermal load they send to the plant.