

SECTION IX

FINANCIAL CONSIDERATIONS

INTRODUCTION

This section will focus on possible funding considerations for the City of Woodland WWTP and Pump Station 4 upgrade and the Force Main intertie from Pump Station 3. This section will also present a preliminary evaluation of the potential impact to sewer rates for completion of the proposed work. For a city the size of Woodland, projects of this magnitude are extremely difficult to implement without grant and low interest loan assistance from state and/or federal funding agencies. Even with optimum financial assistance, Woodland will experience a substantial increase in their sewer rates as a result of the proposed projects. The most likely sources of funding for this project will be:

1. The Washington State Department of Ecology (DOE), Centennial Clean Water Fund Program (CCWF).
2. The Washington State DOE, State Revolving Loan Fund (SRF).
3. Clark County, Community Development Block Grant (CDBG).
4. The Department of Community Trade and Economic Development (CTED), Public Works Trust Fund (PWTF).
5. U.S. Department of Agriculture, The Rural Utility Service (RUS), formerly known as FmHA and RDA.
6. U.S. Department of Agriculture, Forest Service (FS).
7. Revenue Bonds, local rates and connection charges.

DEPARTMENT OF ECOLOGY (DOE)

The DOE has a grant/loan program called the Centennial Clean Water Fund Program (CCWF) and a loan program called the State Revolving Loan Fund (SRF). In 1998 the grant program had approximately \$28 million (of which only about \$10 million was available for projects such as Woodlands) and the SRF loan program approximately \$45 million. These programs are used to fund statewide projects that are directed toward the elimination of adverse water quality

impacts. For planning projects, the Centennial grant program provides for 75% grants with a maximum ceiling of \$250,000 per project per year. For construction projects the program provides 50% grants with a maximum ceiling of \$2.5 million per project per year. Design costs are not eligible for grant funding but are eligible for SRF loans. Land costs are currently eligible for Centennial Clean Water loans only.

In both the grant and loan programs, applications from throughout the State are accepted in February of each year. Each project is assigned priority rating points by DOE personnel and all projects are prioritized. Projects receiving the highest priority points, and falling within the budgets available to DOE will be given a grant and/or loan offer (usually by about August or September of the same year the applications were received). In recent years, the projects that have received the highest priority points are projects that address the state's highest priority water quality protection and water pollution control needs.

Based on the preliminary determination of grant eligibility (see Appendix I Tables 2 and 3), it appears approximately 75% of the WWTP project costs and 25% of the Pump Station and Force Main intertie costs are eligible for DOE grant funding. Since design costs are not eligible for DOE grants, and the City has a PWTF loan for design, it is recommended that the City proceed with design at this time. Following completion of design, the City can then apply for a DOE grant and/or loan in February of 2000 or 2001 for construction of the recommended WWTP improvements.

The Centennial grant program will only fund improvements for existing capacity while the Centennial loan program will fund existing capacity plus an allowance of 10% for growth. The SRF loan program will fund capacity for a 20-year period. Although about 15% of the recommended improvements are for growth (see Appendix I Table 4), most of the costs are required so that the WWTP can meet today's standards for treatment, reliability and protection of water quality in the Lewis River.

The State Revolving Fund (SRF) includes federal, and state funds. Since federal funds are involved through the Environmental Protection Agency (EPA), projects must comply with all

the federal requirements as has been required in the past for projects receiving an EPA grant. This will include completion of a SEPA checklist and a State Environmental Review Process (SERP) checklist and holding a public hearing. The SEPA and SERP are included in Appendix J.

Currently the general terms of loans issued under the SRF program are as follows:

All 15-20 year loan terms will be set at 75% of the market rate, 6-14 year loan contracts will be set at 60% of the market rate, and loans to be repaid in 5 years or less shall be 0% interest. The market will be determined by the state after consultation with expert financial advisors. If a community's monthly residential sewer rates are at or above 1.5% of the median household income (MHI), DOE can adjust interest rates and/or provide additional grant funding in an attempt to keep rates at or below this hardship level.

Under the SRF program applications are accepted in January and February of each year. DOE then prepares an Intended Use Plan (IUP) that identifies projects that may be funded. This plan is generally finalized by the first part of September and the agency is then in a position to begin making loans.

Woodland's project will qualify for a SRF loan, and the City should apply for an SRF loan to help pay the cost of the recommended improvements. The SRF loan can be used by the City as the City's matching funds for a PWTF loan. By obtaining an SRF loan the City may qualify for a PWTF loan with a 1% interest rate. To be eligible for the SRF program, the Facilities Plan must be approved in order to meet the Federal requirements.

PUBLIC WORKS TRUST FUND (PWTF)

This program offers low interest loans to communities for a wide variety of projects. PWTF loans may be used only for the repair, replacement rehabilitation, reconstruction or improvement of eligible public works systems to meet current standards for existing users.

Trust fund loans are not designed to finance growth related project expenditures. An evaluation (see Appendix I Table 4) shows that about 15% of the improvements are for growth and that approximately 85% are required to meet today's treatment standards, to provide treatment reliability and to protect water quality in the Lewis River. To be eligible for the PWTF Loan Program, the community must have an approved Capital Improvement Plan (CIP) identifying its public works needs and how they may be financed, and must have implemented the 1/4% real estate excise tax. Woodland complies with both of these threshold requirements.

In 1998, \$53 million were available in this fund statewide. The program has a ceiling of \$7.0 million per biennium and provides a payback period of 20 years for major projects. The interest rates are either 1%, 2%, or 3%, depending on the amount of matching City funds committed toward the project. A 10% City match qualifies the community for a 3% loan; a 20% City match qualifies for a 2% loan; and a 30% matching share qualifies for a 1% loan. Loan money from other sources (such as DOE) can be used as the city's share of matching funds.

Applications are accepted in the spring of each year (usually March or April) and projects that receive a loan offer can expect the funding to be available in spring of the following year (usually May or June). A project funded by PWTF must begin no later than October 1st following legislative approval and be completed within 36 months of the loan agreement.

To secure funding as quickly as possible, the City applied for a PWTF loan in the spring of 1998. Preliminary cost estimates for that application were developed without the benefit of a General Sewer Plan and included both design and construction of anticipated WWTP improvements. The City's application has been recommended by the PWTF Board to the legislature for funding. It is anticipated that funding for this project will be appropriated and the money will be available to the City for design as early as May 1999.

PWTF also has monies available for pre-construction design, engineering, and right-of-way acquisition that are not subject to the one-year application delay. The major difference between this money and the traditional PWTF loan is the payback period is set at 5 years and the

maximum amount available is \$1 million. The application deadlines for these more immediate funds are twice yearly, in the spring and fall, and monies are available within six months. If the City's current application is not funded by PWTF then the City should apply for the design costs under this program.

CLARK COUNTY COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

The City of Woodland is eligible for the Clark County Community Development Block Grant (CDBG) Program administered by Clark County. Local matches are encouraged but not required and can be in the form of funding from other sources including rate increases. The maximum project request is \$300,000. Applications are usually due in December. Following receipt of all applications, they are reviewed and prioritized and a meeting is held in March to determine which projects will receive funding. If funded, the grant money is usually available by about June or July.

The CDBG grant program may be used to fund projects in two categories as shown below:

1. Infrastructure
2. Social Services

The City has submitted an application to CDBG for a \$300,000 grant under the Infrastructure category.

RURAL UTILITY SERVICES (RUS)

RUS (formerly known as Farmers Home Administration, FmHA and RDA) primarily provides loans for a variety of projects to rural communities at lower interest rates than can be obtained through the sale of revenue bonds. They do have a grant program, but the procedure for qualifying for a grant is complicated and is determined on a case by case basis, generally after all other funding sources are in place. The threshold determination for qualifying for a grant is tied into the amount that residential customers are paying for debt service, the amount of grant money obtained from all funding sources, and the amount other communities with similar sewage facilities are paying for their service.

RUS accepts applications throughout the year and funds projects on a first come, first serve basis up to their annual budget. Since the federal fiscal year begins in October, there is generally more money available for loans at this time. RUS will work with a community to help put a funding package together. However, they prefer to see other funding sources in place prior to making their commitment.

Currently, revenue bonds sold through RUS have a 30 to 40 year term at approximately 4.5% interest. RUS requires a coverage factor amounting to one year's loan payment over a 10-year period. It is recommended that Woodland pursue funding from DOE and PWTF. One drawback with using RUS funding is the 30 to 40 year term. This term generally exceeds the design life of a treatment plant and, although the annual payments will be lower, the total amount repaid for the money borrowed is much higher. If the City is unable to obtain funding from DOE and PWTF, then RUS may be considered as a potential alternative-funding source. The City may want to consider seeking RUS funding concurrently with the effort to obtain DOE and PWTF funding. By doing so, a potential delay in the schedule may be avoided.

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE (FS)

The U.S. Forest Service provides rural communities within 100 miles of a national forest and have 15% dependency on natural resource-based industries with monies for infrastructure development.

Three different programs, each with specific goals, are available. They are: the Northwest Economic Adjustment Initiative (the President's Forest Plan), Economic Recovery Program, and the Rural Development Program. The goals of the program range from development of new economic opportunities for high skilled jobs to organization of action teams and community planning for projects that are linked to natural resources.

The City should submit an application for these monies through the Washington Cities Economic Revitalization Team (WACERT) process which accepts applications throughout the year. To date, the City has been unsuccessful in obtaining any funding from this source.

REVENUE BONDS

The least desirable option to the City of Woodland is to sell revenue bonds on the open market. Currently, such bonds are selling for about five percent (5%) interest over 20 years and require a coverage factor of about 40%. The sale of revenue bonds should only be considered as a viable funding option as a last resort.

OTHER POSSIBLE SOURCES

The association of Washington Cities has developed a detailed list of financial resources for all cities. This list is in the form of a booklet and outlines other possible funding alternatives. City planners and the City Council should consult this booklet and complete a detailed rate analysis while developing a funding package for projects outlined in the General Sewer Plan. A copy of the AWC booklet can be obtained by calling (360) 586-7656.

SEWER RATES

The recommended SBR alternative for the new WWTP has a project cost estimate of about \$7.38 million and an additional O&M cost of \$36,000 per year plus debt service. There are also Phase I recommended improvements to be made to Pump Station 4 totaling \$241,706 and piping modifications to the force main from Pump Station 3 totaling \$44,500. This results in a total Phase I project cost of \$7.66 million. The City will need to aggressively seek grant and low interest loan funding to implement this project. One of the first things that funding agencies look at is the current monthly charge for sewer service. If rates are at "hardship" levels, the City qualifies for increased grant funding and lower interest rates. The rule of thumb is that rates need to be at least 1.5% of the median household income (MHI) for the community to qualify for hardship funding. For Woodland, the MHI used by DOE is \$32,448/year which results in a hardship level sewer rate of about \$40.56 per month. Currently, rates for single family residences are \$20.00 every month.

One strategy that has been used successfully by some communities (for example Chehalis) to help get outside funding is to raise their sewer rates early in the project so that a reserve fund

accumulates to help pay for the project. Raising rates early in the project also sends a definite signal to funding agencies that the City is ready, and in fact has begun, implementing the recommended project. Since the increased revenue generated is used to help offset project costs, this reduces the amount of loan needed and allows the City to receive lower interest rates which in turn results in somewhat lower monthly sewer charges. Finally, once the project is completed, the increased revenue (generated from the increased rates) is used to repay the new debt service and operation and maintenance (O&M) costs for the new wastewater treatment system.

The impact on sewer rates that will be needed to implement the recommendations of this Plan are significant. The City may want to consider evaluating alternative rate structures prior to implementing any rate increase. Attached are a series of tables that show two funding options. These options are presented here to provide the Mayor and Council with potentially viable funding considerations and to demonstrate the relative size and timing of rate increases that will be required because of this project.

FUNDING OPTION NO. 1

This funding option assumes that no grants are secured for the project. Table IX-1 assumes that a \$4,271,760 loan is secured from PWTF (with terms of 1% over 20 years) and that two loans are secured from DOE (each with terms of 4.1% over 20 years). One DOE loan is for \$2,651,440 for the WWTP and the second loan is for \$286,206 for the Pump Station and Force main improvements. Table IX-1 also shows that it will take a \$23.69/month increase for 1,600 customers to repay these loans and that this increase would generate in twelve months approximately \$454,800 in revenue for the City to use towards the project.

Table IX-2 shows the 1998 sewer budget for the City along with projected budgets for the years 1999 through 2008. In 1999 a second WWTP operator has been added to the O&M costs and it is assumed the City will incur project costs of \$227,400 per year in the years 2000 and 2001. In 2002 new debt service (to pay for loans used to construct the recommended

**Table IX - 1 FUNDING OPTION NUMBER 1 WITHOUT GRANT FUNDING
BASED ON THE SEQUENCING BATCH REACTOR (SBR) ALTERNATIVE**

FUNDING SOURCES PWTF LOAN DOE LOAN CITY OF WOODLAND	ESTIMATED COST	DOE GRANT (1)	LOCAL SHARE FROM CITY OF WOODLAND (2)	ESTIMATED TOTAL COST TO BE BORROWED
ELIGIBLE FOR DOE GRANT AND/OR PWTF LOAN (3)	\$6,307,700	\$0	\$0	\$6,307,700
WWTP COST THAT ARE INELIGIBLE FOR PWTF LOAN	\$1,070,300	\$0	\$454,800	\$615,500
PUMP STATION 4 (3)	\$241,706	\$0	\$0	\$241,706
FORCE MAIN INTERTIE	\$44,500	\$0	\$0	\$44,500
	\$7,664,206	\$0	\$454,800	\$7,209,406
	PWTF LOAN FOR WWTP	DOE LOAN FOR WWTP	DOE LOAN FOR PUMP STATIONS	TOTAL LOANS
LOAN PORTION OF CAPITAL COST	\$4,271,760	\$2,651,440	\$286,206	\$7,209,406
INTEREST RATE	1.00%	4.10%	4.10%	
YEARS OF LOAN	20	20	20	
CAPITAL RECOVERY FACTOR	0.05542	0.07423	0.07423	
ANNUAL PAYMENT	\$236,721	\$196,829	\$21,246	\$454,796
MONTHLY PAYMENT	\$19,727	\$16,402	\$1,771	\$37,900
MO.PAYMENT/CUST AT 1,600 CUSTOMERS (5)	\$12.33	\$10.25	\$1.11	\$23.69

(1) MAXIMUM DOE GRANT IS \$2,500,000

(2) ASSUMES THE LOCAL SHARE IS RAISED FROM RATE INCREASES THAT TAKE AFFECT 12 MONTHS PRIOR TO THE NEED TO USE THE REVENUE FOR MAKING LOAN PAYMENTS (SEE BELOW).

COST PER MONTH	NUMBER OF MONTHS	NUMBER OF CUSTOMERS	REVENUE GENERATED
\$23.69	12	1,600	\$454,796

(3) OF THE WWTP COST, \$5,592,900 IS ESTIMATED AS ELIGIBLE FOR DOE GRANT (SEE APPENDIX I)

(4) OF THE P.S. & FORCE MAIN COST, \$70,739 IS ESTIMATED AS ELIGIBLE FOR DOE GRANT (SEE APP. I)

(5) ESTIMATED BASED ON REVENUE GENERATED AT EXISTING BASE RATE

sewer system improvements) and \$36,000 in additional O&M costs have been added to the annual O&M costs for the sewer utility. In each year from 1999 through 2008 the O & M costs have been increased at 3% per year. The proposed costs for providing sewer service assume the new improvements will be completed and placed in operation by the year 2002.

At the top of Table IX-3 the annual estimated growth in the number of sewer customers is projected based on a growth rate of 2% per year. Although treatment capacity has been estimated based on a population growth rate of 5%, paying for the new facilities is based on a population growth rate of only 2%. This is believed to be a conservative approach to help insure the improvements can be afforded if growth slows in the future. If the City experiences a growth rate greater than 2% then additional revenue will be generated from connection charges and inspection fees which will allow lower monthly sewer rates than shown in Table IX-3.

The “middle top” of Table IX-3 shows the 1998 sewer rates and a series of rate increases (in the years 1999, 2000, 2002 and 2005) that will be necessary to pay the annual O & M and debt service costs shown in Table IX-2. These increases assume an annual growth rate in the number of new sewer customers of 2% per year.

The “middle bottom” of Table IX-3 shows the estimated revenue that will be generated each year from connection charges, inspection fees, the flat monthly sewer charge and the overage charge for sewer service if excess water is used. The total estimated revenue for each year from 1998 through 2008 is also shown.

The bottom of Table IX-3 shows the “excess” revenue that is generated each year either over or (under) the estimated cost to provide sewer service as shown in Table IX-2. Also shown at the bottom of Table IX-3 is a line labeled “Accumulated Operation & Maintenance Reserve”. As presented in this funding scenario, revenue generated by the rate increases is used in the early years to help pay project costs and in later years is used to pay debt service and to avoid further increases during those years when the projected annual revenue is less than annual costs (for example see years 2002, 2003, and 2004

TABLE IX-3 FUNDING OPTION NUMBER 1 WITHOUT GRANT FUNDING

PROJECTED SEWER SERVICE REVENUE

REVENUE ITEM	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
ESTIMATED NUMBER OF EXISTING CUSTOMERS AT BEGINNING OF YEAR	1,600	1,632	1,664	1,665	1,698	1,732	1,767	1,802	1,838	1,875	1,912
ESTIMATED NEW CUSTOMERS WITH GROWTH RATE AT 2% (SEE NOTE 1)	32	32	33	33	34	35	35	36	37	37	38
ESTIMATED SEWER SYSTEM CHARGES											
RESIDENTIAL CONNECTION CHARGE PER EACH NEW CUSTOMER	\$2,000	\$2,500	\$3,975	\$3,975	\$5,009	\$5,009	\$5,009	\$5,009	\$5,009	\$5,009	\$5,009
INSPECTION FEE PER EACH NEW CUSTOMER	\$70	\$87.50	\$139.13	\$139.13	\$175.30	\$175.30	\$175.30	\$175.30	\$175.30	\$175.30	\$175.30
FLAT SEWER RATE/MONTH	\$16.00	\$20.00	\$31.80	\$31.80	\$40.07	\$40.07	\$40.07	\$40.07	\$40.07	\$40.07	\$40.07
OVERAGE CHARGE PER 100 cf	\$1.25	\$1.56	\$2.48	\$2.48	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13	\$3.13
INCREASE IN SEWER SYSTEM CHARGES REQUIRED (SEE NOTE 2)	0.0%	25.0%	59.0%	0.0%	26.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REVENUE GENERATED FROM :											
CONNECTION CHARGES	\$64,000	\$80,000	\$129,744	\$132,339	\$170,082	\$173,484	\$176,953	\$180,492	\$184,102	\$187,784	\$191,540
INSPECTION FEES	\$2,240	\$2,800	\$4,541	\$4,632	\$5,953	\$6,072	\$6,193	\$6,317	\$6,444	\$6,572	\$6,704
FLAT RATE/ MONTH	\$307,200	\$384,000	\$622,771	\$635,227	\$816,393	\$832,721	\$849,376	\$866,363	\$883,690	\$901,364	\$919,391
ESTIMATED REVENUE FROM OVERAGE BASED ON 100 C.F./MO/CUST.	\$24,000	\$30,600	\$49,608	\$49,627	\$63,781	\$65,056	\$66,357	\$67,665	\$69,038	\$70,419	\$71,827
TOTAL ESTIMATED REVENUE GENERATED	\$397,440	\$497,400	\$806,664	\$821,824	\$1,056,209	\$1,077,333	\$1,098,860	\$1,120,857	\$1,143,274	\$1,166,140	\$1,189,463
REVENUE GENERATED EACH YEAR IN EXCESS OF OPERATING COST			\$35,437	\$35,038	(\$9,999)	(\$6,461)	(\$3,029)	\$292	\$3,492	\$6,564	\$9,499
ACCUMULATED OPERATION & MAINTENANCE RESERVE		(\$31,322)	\$4,115	\$39,154	\$29,155	\$22,693	\$19,665	\$19,957	\$23,448	\$30,012	\$39,511
ACCUMULATED O & M RESERVE AS A % OF TOTAL REVENUE GENERATED		-6.3%	0.5%	4.8%	2.8%	2.1%	1.8%	1.8%	2.1%	2.6%	3.3%

NOTE 1. WWTP CAPACITY HAS BEEN DESIGNED FOR A GROWTH RATE OF 5 % PER YEAR
SEWER REVENUE HAS BEEN ESTIMATED BASED ON A GROWTH RATE OF 2 % PER YEAR

NOTE 2. RATE INCREASES APPLY TO ALL CHARGES AND HAVE BEEN SET TO ESTABLISH AN ACCUMULATIVE O & M RESERVE ACCOUNT EQUAL TO ABOUT 2.5 - 5 % OF TOTAL REVENUE