

Table IX-3 indicates that under the current rate structure and this funding scenario, Woodland will be required to increase their flat monthly rate from approximately \$20/month to \$32/month in the year 2000 and about \$40/month by the year 2002. Additional increases are also needed in the other system changes including the connection charge, the inspection fee and the overage charge.

FUNDING OPTION NO. 2

As shown on Table IX-4, this funding option assumes that a \$4,271,760 loan is secured from PWTF with terms of 3% over 20 years and that two loans (each with terms of 4.1% over 20 years) are secured from DOE. One DOE loan is for \$884,689 for the WWTP and the second DOE loan is for \$286,206 for the Pump Station and Force main improvements. Table IX-4 also shows that it will take a \$19.48/month increase for 1,600 customers to repay these loans and that this increase would generate in twelve months approximately \$374,100 in revenue for the City to use towards the project. The City's cash contribution and the two DOE loans cover the local match required for the PWTF loan and pay the costs for "growth capacity" which is not eligible for DOE grants or PWTF loans. This funding scenario assumes a DOE grant is obtained to cover all cost not covered by the PWTF and DOE loans or by cash contributions from the City. The estimated DOE grant is therefor \$1,847,500.

Table IX-5 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 \$187,050 per year in the years 2000 and 2001. In 2002 new debt service (to pay for loans used to construct the recommended 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.

**Table IX - 4 FUNDING OPTION NUMBER 2 WITH 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	\$1,847,500	\$0	\$4,460,200
WWTP COST THAT ARE INELIGIBLE FOR PWTF LOAN	\$1,070,300	\$0	\$374,051	\$696,249
PUMP STATION 4 (3)	\$241,706	\$0	\$0	\$241,706
FORCE MAIN INTERTIE	\$44,500	\$0	\$0	\$44,500
	\$7,664,206	\$1,847,500	\$374,051	\$5,442,655
	PWTF LOAN FOR WWTP	DOE LOAN FOR WWTP	DOE LOAN FOR PUMP STATIONS	TOTAL LOANS
LOAN PORTION OF CAPITAL COST	\$4,271,760	\$884,689	\$286,206	\$5,442,655
INTEREST RATE	3.00%	4.10%	4.10%	
YEARS OF LOAN	20	20	20	
CAPITAL RECOVERY FACTOR	0.06722	0.07423	0.07423	
ANNUAL PAYMENT	\$287,129	\$65,675	\$21,246	\$374,051
MONTHLY PAYMENT	\$23,927	\$5,473	\$1,771	\$31,171
MO.PAYMENT/CUST AT 1,600 CUSTOMERS (5)	\$14.95	\$3.42	\$1.11	\$19.48

(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
\$19.48	12	1,600	\$374,051

(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

At the top of Table IX-6 the annual estimated growth in the number of sewer customers is 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-6.

The "middle top" of Table IX-6 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-5. These increases assume an annual growth rate in the number of new sewer customers of 2% per year.

The "middle bottom" of Table IX-6 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-6 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-5. Also shown at the bottom of Table IX-6 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, 2004, and 2005).

Table IX-6 indicates that under the current rate structure and this funding scenario, Woodland will be required to increase their flat monthly rate from approximately \$20/month to \$30.20/month in the year 2000 and to \$37.15/month by 2002. Based on the projections from this analysis, the sewer rates then level out throughout the year 2008. Additional increases are also needed in the other system changes including the connection charge, the inspection fee and the overage charge.

TABLE IX-8 FUNDING OPTION NUMBER 2 WITH 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	1,695	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	\$3,775	\$3,775	\$4,643	\$4,643	\$4,643	\$4,643	\$4,643	\$4,643	\$4,643
INSPECTION FEE PER EACH NEW CUSTOMER	\$70	\$87.50	\$132.13	\$132.13	\$162.51	\$162.51	\$162.51	\$162.51	\$162.51	\$162.51	\$162.51
FLAT SEWER RATE/MONTH	\$16.00	\$20.00	\$30.20	\$30.20	\$37.15	\$37.15	\$37.15	\$37.15	\$37.15	\$37.15	\$37.15
OVERAGE CHARGE PER 100 cf	\$1.25	\$1.56	\$2.36	\$2.36	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90
INCREASE IN SEWER SYSTEM CHARGES REQUIRED (SEE NOTE 2)	0.0%	25.0%	51.0%	0.0%	23.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
REVENUE GENERATED FROM :											
CONNECTION CHARGES	\$64,000	\$80,000	\$123,216	\$125,680	\$157,679	\$160,832	\$164,049	\$167,330	\$170,676	\$174,090	\$177,572
INSPECTION FEES	\$2,240	\$2,800	\$4,313	\$4,389	\$5,519	\$5,629	\$5,742	\$5,857	\$5,974	\$6,093	\$6,215
FLAT RATE/MONTH	\$307,200	\$384,000	\$591,437	\$603,266	\$756,857	\$771,994	\$787,434	\$803,183	\$819,246	\$835,631	\$852,344
ESTIMATED REVENUE FROM OVERAGE BASED ON 100 C.F./MO/CUST.	\$24,000	\$30,600	\$47,112	\$47,130	\$59,129	\$60,312	\$61,518	\$62,748	\$64,004	\$65,284	\$66,589
TOTAL ESTIMATED REVENUE GENERATED	\$397,440	\$497,400	\$768,077	\$780,475	\$979,184	\$998,767	\$1,018,743	\$1,039,118	\$1,059,900	\$1,081,068	\$1,102,720
REVENUE GENERATED EACH YEAR IN EXCESS OF OPERATING COST		(\$31,322)	\$95,200	\$34,039	(\$8,278)	(\$4,281)	(\$2,419)	(\$702)	\$863	\$2,268	\$3,502
ACCUMULATED OPERATION & MAINTENANCE RESERVE		(\$31,322)	\$3,878	\$37,817	\$31,839	\$27,358	\$24,989	\$24,237	\$25,100	\$27,368	\$30,870
ACCUMULATED O & M RESERVE AS A % OF TOTAL REVENUE GENERATED		-6.3%	0.5%	4.9%	3.2%	2.7%	2.4%	2.3%	2.4%	2.5%	2.8%

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