

TO: James L. App, City Manager
FROM: Doug Monn, Public Works Director
SUBJECT: Proposed Wastewater Rate Method and Facility Charges
DATE: September 6, 2011

NEEDS: For the City Council to consider a revised wastewater rate method, to introduce the proposed wastewater facility charges (connection fees), and authorize customer notification.

FACTS:

1. Current wastewater rates and wastewater facility charges (i.e. connection fees) generate approximately \$4.7 million/year for wastewater collection, treatment, and disposal service to residents and businesses.
2. Residential customers currently pay a fixed sewer rate of \$25.86 per month; plus, newly constructed residences pay a connection fee of \$5,467. The sewer rates and connection fees for non-residential customers are calculated differently (see **Attachment 1**).
3. The Wastewater Fund operates with an annual deficit of \$231,000, requiring the City to use reserves; the available fund balance is approximately \$3.7 million.
4. Improvements to the City's 58-year-old wastewater treatment plant are needed to improve the quality of treated waste water discharges into the Salinas River and to comply with more rigorous State and Federal discharge restrictions.
5. The Regional Water Quality Control Board currently fines the City approximately \$9,000 per month for discharge violations. Unless improvements are made to the treatment plant thereby improving the quality of wastewater discharge, fines could escalate to \$10,000 per day. (See letter dated August 8, 2011, from the Regional Water Quality Control Board [**Attachment 2**].)
6. The Water Board has set deadlines for the City to implement plant construction/process improvements to address the City's discharge. Meeting these deadlines would avoid additional fines.
7. Design of the plant upgrade is complete and is estimated to cost \$49.6 million; additional capital projects totaling \$32 million over the next 16 years will be needed to address the City's aged collection system. Annual costs will total \$11 to \$14 million to fund operations and maintenance costs, debt service, planned capital projects, and depreciation.
8. The revenues generated by the existing wastewater rate structure are inadequate to sustain wastewater system operations; neither can they fund necessary treatment plant or collection system repairs, upgrades, and replacements necessary to serve customers in compliance with Regional Water Quality Control Board and Federal Environmental Protection Agency requirements.
9. Similarly, the existing wastewater facility charges (connection fees) need updating to reflect new development's impact on the wastewater system.

10. The City Council retained the services of Kennedy/Jenks Consultants and TJ Cross Engineers to perform a wastewater needs assessment, rate and facility charge study.

**ANALYSIS &
CONCLUSION:**

The revenue needs associated with operation of the wastewater infrastructure system over the coming five years were analyzed in August 2011 reports entitled “Wastewater Rate and Revenue Analysis Draft Report” and “Wastewater Facility Charge Final Report” prepared by Kennedy/Jenks Consultants (**Attachments 3 and 4**).

The foundation of both studies was that all pay their fair share for wastewater system services. To that end, new development’s share in each component of the wastewater system was taken into account in establishing a revenue program.

Wastewater Rate Structure

There are a variety of pricing strategies that could be followed to generate the funds needed to meet the City’s financial obligations, including:

Fixed Rates: Charge a fixed amount for all residential customers, regardless of estimated wastewater discharge levels. This pricing strategy is certainly easy to administer, but fails to recognize variations in demand on the wastewater system by larger users. As is the case for all wastewater utilities, 70 to 80 percent of the costs to operate and manage the City’s system is essentially fixed (i.e. does not vary with flow). While fixed revenue benefits a utility’s financial stability, it does have some negative aspects; this rate element typically inhibits low volume customers’ ability to reduce their utility bill and does not support water conservation. As such, reducing or eliminating the City’s fixed charge would mitigate these rate issues. Eliminating the fixed charge however, means the variable charge will need to recover all of the system’s costs; currently, essentially all of the wastewater utility’s costs are derived from the fixed monthly charge.

Pay for What You Use: Structure wastewater service billing according to actual wastewater generation. This “pay for what you use” principle is the same that has been adopted for the water utility. It is familiar, more closely linked to actual flows into the system, but does require some customers’ billings to be based on usage during non-irrigation months to avoid charging for water usage that doesn’t enter the wastewater system. By eliminating the fixed charge, low volume customers have a new opportunity to significantly reduce their monthly water bills. Charging based solely on water usage is the purest form of the “pay for what you use” approach.

Conservation Pricing: Charge tiered rates such that larger dischargers pay more for higher volumes of discharge. This pricing strategy supports water conservation and community understanding. There would be a stronger case for this type of wastewater billing structure if City water bills were also structured in this tiered fashion.

In consideration of the above, a Pay for What You Use structure is recommended. Accompanying this decision is the realization that the shift from an all-fixed to an all-variable rate structure may affect the financial stability of the wastewater enterprise and adversely affect some of the City’s customers. From a financial stability perspective, the benefits of the all-variable rate outweighed the financial risk.

Metering actual sewage flow is impractical, so metered water usage is proposed as a basis for wastewater billing. Basing customer wastewater bills on water usage poses a key question -- "Will I be billed for irrigation water that does not flow to the sewer?" No. The proposed billing structure would establish:

- Single Family Residences: Customer bills will be based on metered "Winter Water Use" from the previous December-January-February billing period, a period when little to no irrigation is typically needed. A customer's average monthly water use during that 3-month period will establish the basis for the year's wastewater billing.¹
- Apartment Buildings: Many apartment and condominium complexes have separate irrigation meters for landscaping such that year-round, metered water use for the main apartment building indicates interior water usage. For this reason, apartments' and condominium wastewater billing will be based on monthly water usage. Apartments and condominiums that currently combine interior water use with exterior landscaping requirements have the option of separating these onto separate water meters if desired.
- Non-Residential Customers: Businesses, hotels, schools, and other non-residential customers' wastewater bills will be based on monthly water usage. Monthly water usage reflects the level of business activity and, for most businesses, wastewater discharge. Businesses with relatively high irrigation demands also have the option of serving irrigation needs through a separate irrigation meter. Other businesses consume high volumes of water in the course of daily business (such as a bottler) but discharge lesser amounts into the sewer. To address this customer category, dischargers that average more than 10,000 gallons per day may estimate their discharge by another means and have their wastewater bill based on that alternate means.
- Landscape and Fire Service Meters: Approximately 312 of the 10,000 water accounts throughout the City are classified as Landscape or Fire Service meters, neither of which results in discharge to the sewer. These accounts will not be billed for wastewater service.
- Septic Systems: Approximately 300 of the City's 10,000 utility accounts have septic systems and are not connected to the City sewer system. These accounts will not be billed for wastewater service.

¹ Very low Winter Water Use [2 hundred cubic feet (HCF) per month or less] will take into account two Winter Water Use periods. If actual water use in any month is less than a customer's Winter Water Use, billing would be based on the actual, lower amount. For new services and accounts that change occupancy, the initial year's billing will be based on 7 HCF/month, the current single family residential median Winter Water Usage.

Financial Analysis

The analysis of wastewater rates and fees involves projection of expenses and revenues such that future revenue requirements depend primarily on four specific areas:

- customer growth and wastewater discharges
- wastewater operations and maintenance costs
- necessary capital improvements
- debt obligations
- depreciation/repair and replacement requirements

Some of these items can be projected with relative certainty. Others are susceptible to factors beyond the City's control. For example, Templeton Community Services District (CSD) recently decided to explore options to disconnect from the City. Templeton CSD is obliged to pay 9% of all capital costs and typically accounts for 4-5% of all user rate income. So, should they ultimately choose to disconnect, there would be user rate and facility charge (a.k.a., connection fee) consequences.

Templeton CSD must obtain approval from the State Water Resources Control Board and other regulators, secure financing, and build extensive infrastructure before it may disconnect from the City. This will require five years or more and their obligation to fund their percentage share of the wastewater treatment plant upgrade in the interim is now in review. If and when Templeton CSD disconnects from the City, staff will reevaluate rates and facility charges and propose any necessary changes.

The City Council must determine the level of risk it is willing to assume and build it into the cost projections.

Option A is based on conservative fiscal projections allowing the Wastewater Fund to withstand variations in key financial elements should they occur. Alternatively, **Option B** is based on less conservative assumptions regarding the key financial elements; this approach would make the fund more vulnerable to unanticipated changes.

A key financial element is whether the City can secure a low-interest loan from the State Clean Water Revolving Fund for the treatment plant upgrade. At this point, the State Revolving Fund appears to be a reliable source of financing. The State Revolving Fund has reviewed the City's credit and has pre-approved low-interest financing. The reliability of the State Revolving Fund is discussed in more detail in **Attachment 5**.

To address this, two alternative pay-for-what-you-use wastewater rates are proposed for consideration.

Option A: This approach projects expenses on the premise that low interest State Revolving Fund financing is not available and higher interest rate commercial financing would be needed for the plant upgrade, and depreciation would be funded sooner. It generates more revenue, providing a safety net to the public to enable the fund to cover such eventualities (such as the possible Templeton CSD disconnection).

Option B: This approach is based on obtaining low interest State Revolving Fund financing and deferring full depreciation funding. In this structure, rate increases are lower in early years, but another round of modest rate increases would be needed, perhaps in Year 8 (plus additional upward pressure on rates if Templeton CSD disconnects). With the need for additional increases comes an implicit risk that these rates may not be acceptable to the community. Should the additional rate increases anticipated with this option not be adopted, wastewater revenues would be insufficient to fund the projected level of depreciation and would eventually be inadequate to meet the City's debt service obligations.

Alternative Wastewater Rates

**TABLE 1
PROPOSED UNIFORM WASTEWATER USAGE RATES**

User Class (All Customers)	Usage Charge \$/HCF				
	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
Option A					
	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
Option B					
	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80

HCF is hundred cubic feet, or 748 gallons.

FY is fiscal year, which runs from July 1st to June 30th of the following calendar year.

Sample comparisons of current billings to each proposed rate option are below:

TABLE 2
TYPICAL WASTEWATER BILLS
OPTION A

Proposed Wastewater Rates
Sample Bill Table - Single Family Residential

Units (HCF)	Current Bill (\$25.86 per home)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0	\$0	\$0	\$0	\$0 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$25.86	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
2		\$10.80	\$14.26	\$18.82	\$20.70	\$20.70
3		\$16.20	\$21.39	\$28.23	\$31.05	\$31.05
25th percentile==> 4		\$21.60	\$28.52	\$37.64	\$41.40	\$41.40
5		\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
6		\$32.40	\$42.78	\$56.46	\$62.10	\$62.10
50th percentile==> 7		\$37.80	\$49.91	\$65.87	\$72.45	\$72.45
8		\$43.20	\$57.04	\$75.28	\$82.80	\$82.80
75th percentile==> 9		\$48.60	\$64.17	\$84.69	\$93.15	\$93.15
10		\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
11		\$59.40	\$78.43	\$103.51	\$113.85	\$113.85
12		\$64.80	\$85.56	\$112.92	\$124.20	\$124.20
13		\$70.20	\$92.69	\$122.33	\$134.55	\$134.55
14		\$75.60	\$99.82	\$131.74	\$144.90	\$144.90
15		\$81.00	\$106.95	\$141.15	\$155.25	\$155.25

Proposed Wastewater Rates
Sample Bill - Small Business Example

Units (HCF)	Current Bill* (small business w/ 1 EDU)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$25.86	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
5	\$25.86	\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
10	\$31.86	\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
15	\$37.86	\$81.00	\$106.95	\$141.15	\$155.25	\$155.25
20	\$43.86	\$108.00	\$142.60	\$188.20	\$207.00	\$207.00
25	\$49.86	\$135.00	\$178.25	\$235.25	\$258.75	\$258.75
30	\$55.86	\$162.00	\$213.90	\$282.30	\$310.50	\$310.50

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Proposed Wastewater Rates
Sample Bill - 4 Unit Motel Example

Units (HCF)	Current Bill* (4 unit motel)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$103.44	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
5	\$103.44	\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
10	\$103.44	\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
15	\$103.44	\$81.00	\$106.95	\$141.15	\$155.25	\$155.25
20	\$103.44	\$108.00	\$142.60	\$188.20	\$207.00	\$207.00
25	\$109.44	\$135.00	\$178.25	\$235.25	\$258.75	\$258.75
30	\$115.44	\$162.00	\$213.90	\$282.30	\$310.50	\$310.50

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Note: Highlighted bills are less than the current rates.

**TABLE 3
TYPICAL WASTEWATER BILLS
OPTION B**

Proposed Wastewater Rates

Sample Bill Table - Single Family Residential

Units (HCF)	Current Bill (\$25.86 per home)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0	\$0	\$0	\$0	\$0 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$25.86	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
2		\$9.00	\$10.80	\$12.60	\$14.70	\$15.60
3		\$13.50	\$16.20	\$18.90	\$22.05	\$23.40
25th percentile==> 4		\$18.00	\$21.60	\$25.20	\$29.40	\$31.20
5		\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
6		\$27.00	\$32.40	\$37.80	\$44.10	\$46.80
50th percentile==> 7		\$31.50	\$37.80	\$44.10	\$51.45	\$54.60
8		\$36.00	\$43.20	\$50.40	\$58.80	\$62.40
75th percentile==> 9		\$40.50	\$48.60	\$56.70	\$66.15	\$70.20
10		\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
11		\$49.50	\$59.40	\$69.30	\$80.85	\$85.80
12		\$54.00	\$64.80	\$75.60	\$88.20	\$93.60
13		\$58.50	\$70.20	\$81.90	\$95.55	\$101.40
14		\$63.00	\$75.60	\$88.20	\$102.90	\$109.20
15		\$67.50	\$81.00	\$94.50	\$110.25	\$117.00

Proposed Wastewater Rates

Sample Bill - Small Business Example

Units (HCF)	Current Bill* (small business w/ 1 EDU)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$25.86	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
5	\$25.86	\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
10	\$31.86	\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
15	\$37.86	\$67.50	\$81.00	\$94.50	\$110.25	\$117.00
20	\$43.86	\$90.00	\$108.00	\$126.00	\$147.00	\$156.00
25	\$49.86	\$112.50	\$135.00	\$157.50	\$183.75	\$195.00
30	\$55.86	\$135.00	\$162.00	\$189.00	\$220.50	\$234.00

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Proposed Wastewater Rates

Sample Bill - 4 Unit Motel Example

Units (HCF)	Current Bill* (4 unit motel)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$103.44	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
5	\$103.44	\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
10	\$103.44	\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
15	\$103.44	\$67.50	\$81.00	\$94.50	\$110.25	\$117.00
20	\$103.44	\$90.00	\$108.00	\$126.00	\$147.00	\$156.00
25	\$109.44	\$112.50	\$135.00	\$157.50	\$183.75	\$195.00
30	\$115.44	\$135.00	\$162.00	\$189.00	\$220.50	\$234.00

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Note: Highlighted bills are less than the current rates.

The proposed wastewater rates would go into effect no sooner than July 1, 2012, with subsequent yearly increases on July 1st of each year. This date is recommended so as not to coincide with planned water rate increases.

Wastewater Facility Charges

The recommended wastewater facility charges are based on a “capacity buy-in approach” wherein the cost of future wastewater system capacity is estimated. Both the value of existing and proposed system assets are included in this method. Then, growth’s share in those total costs is calculated.

For example, the Kennedy/Jenks report describes how the value of existing system components (the collection, pumping, and treatment systems) was estimated. Similarly, the value of future facilities was also taken into consideration.

As was the case with wastewater user fees, two optional financing plans have been prepared for consideration. One would prepare the Wastewater Fund to support conventional financing, providing a safety net to the public in the event that this borrowing plan was used. The other is based on low-interest State Revolving Fund financing, resulting in lower charges but leaving the fund more vulnerable to unforeseen costs. The estimated total system value for these two options are:

Conventional Financing \$284,581,600 Total System Value
Low Interest SRF Financing \$239,473,800 Total System Value

Growth’s share in these values was calculated by comparing current wastewater flows and the number of equivalent dwelling units served to projected flow and units at build-out. This analysis demonstrated that growth’s share in system capacity is 36.1%.

Under both approaches, the proposed wastewater facility charges would take effect January 1, 2012, and increased annually thereafter on January 1 over the next two years as follows:

**TABLE 4
Proposed Wastewater Facility Charges**

	Year 1	Year 2	Year 3
Conventional Financing (User Rate Option A)			
Single Family Dwelling, Charge per dwelling	\$12,900	\$12,900	\$12,900
Multi Family Dwelling, Charge per unit	\$11,600	\$11,600	\$11,600
Non-Residential, Charge/EDU	\$12,900	\$12,900	\$12,900

State Revolving Fund Financing (User Rate Option B)			
Single Family Dwelling, Charge per dwelling	\$7,300	\$9,100	\$10,900
Multi Family Dwelling, Charge per unit	\$6,570	\$8,190	\$9,800
Non-Residential, Charge/EDU	\$7,300	\$9,100	\$10,900

EDU = equivalent dwelling unit. Non-residential facility charges to be based on meter size up to 3-inch water meters. Charges for meters larger than 3-inch and/or those that are projected to discharge in excess of 10,000 gallons of wastewater per day are to prepare an estimate of wastewater discharge such that facility charger will be based in part on that estimate.

When the proposed rates and fees are adopted, the City will be on the road to provide for the sanitation needs of Paso Robles for the next 30 to 40 years.

POLICY

REFERENCE: General Plan, Economic Strategy; Integrated Water Resource Plan; 2007 Sewer Collection System Master Plan.

FISCAL IMPACT: Failure to put new wastewater rates and facility charges in effect would exhaust the remaining Wastewater Fund reserves within 3 years and violate the Regional Water Quality Control Board's Time Schedule Order No. R3-2011-0213. Failure to upgrade the plant could subject the City to fines of up to \$10,000 per day.

Adopting the proposed wastewater rate increases and facility charges would allow the City to meet its current debt obligations, finance the necessary treatment plant upgrade, accumulate a depreciation fund, and continue to meet the community's sewer needs.

OPTIONS: a. Approve the pay-for-what-you-use rate method, proposed rates, and facility charges:

1. Adopt one of the attached Resolutions No. 11-xx (**Attachment 6**) thereby selecting a wastewater rate method and authorize initiation of the procedures required by Article XIID of the California Constitution for adoption of the proposed wastewater rate structure; and
2. Introduce the proposed wastewater facility charges (connection fees) and instruct staff to send out advance notices regarding consideration for adoption at the September 20, 2011, Council meeting, or

b. Amend, modify, or reject the above option.

ATTACHMENTS:

- 1) Wastewater Rates and Fees in Effect as of July 1, 2011
- 2) Letter from RWQCB Executive Director to the Paso Robles Mayor dated August 11, 2011
- 3) "City of Paso Robles Wastewater Rate and Revenue Analysis Draft Report" dated August 2011, prepared by Kennedy/Jenks Consultants
- 4) "Wastewater Facility Charge Final Report" dated August 2011, prepared by Kennedy/Jenks Consultants
- 5) Memo dated August 15, 2011, from City Wastewater Resources Manager regarding State of California Clean Water Revolving Fund Loan Program
- 6) Alternative Resolutions No. 11-xx, 11-yy (Option A), and 11-zz (Option B)

WASTEWATER RATES IN EFFECT AS OF JULY 1, 2011

Charge Description	Unit Rate	Customer Class
Monthly Fixed Charge/Unit ^(a)	\$25.86	(Applies to all customer classes)
Variable Rate for Non-Residential Only (Applies to water usage beyond 5 hcf/DU)	\$1.20/hcf	Non-Residential Only

(a) Where: Unit is dwelling, hotel room, non-residential occupied units, etc...
Source: City of Paso Robles; Rates effective July 1, 2004.

SEWER CONNECTION FEES IN EFFECT AS OF JULY 1, 2011

<u>Type of Development</u>	<u>Sewer Connection Fee</u>
Single Family Residence	\$5,467
Multi-Family Residence	\$4,961
Mobile Home Park	\$5,467
Mobile Home Subdivision Lot	\$5,467
Commercial/Industrial	\$5,467
Hosp/Convalescent	\$5,467 + \$252 per room
Motel/Hotel	\$5,467 + \$102 per room
School	\$7,723 + \$102 per classroom

Attachment 2
Letter from RWQCB to Paso Robles
Dated August 11, 2011



Matthew Rodriguez
Secretary for
Environmental Protection

California Regional Water Quality Control Board Central Coast Region

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906
(805) 549-3147 • FAX (805) 543-0397
<http://www.waterboards.ca.gov/centralcoast>



Edmund G. Brown Jr.
Governor

August 11, 2011

Mayor Duane Picanco and City Council Members
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446
council@prcity.com

Sent via Electronic Mail only

Mayor Picanco and City Council Members:

PENDING WASTEWATER TREATMENT FACILITY UPGRADE – THE CITY OF EL PASO DE ROBLES WASTEWATER TREATMENT PLANT, SAN LUIS OBISPO COUNTY (WDID 3 400105001)

The Paso Robles Wastewater Treatment Plant is at the end of its useful life and no longer performs reliably. The plant's discharge to the Salinas River contains high levels of nitrate, ammonia, and other harmful pollutants. Consequently, over the last several years the City has paid mandatory penalties averaging \$9,000 per month for the ongoing violation of permit requirements. The City will continue to incur mandatory fines (these penalties were established by the California State Legislature as "mandatory minimum penalties" and the Regional Water Board has no discretion) for water quality violations until the plant is sufficiently upgraded to meet the permit requirements.

The Central Coast Regional Water Quality Control Board (Water Board) appreciates the City's efforts to plan and design a major plant upgrade to address these problems and set the stage for a recycled water project. The successful implementation of the plant upgrade project is now predicated on the City securing project funding.

The Water Board recently issued Time Schedule Order R3-2011-0213 (TSO) that requires the City to complete construction and startup of a new plant by September 1, 2015. In addition, the first two project milestones of the TSO require the City to adopt an ordinance to increase wastewater facility charges by November 1, 2011, and introduce wastewater rate increases to the public and begin the Proposition 218 process by January 1, 2012. I understand the City Council is tentatively planning to consider changes to both facility charges and wastewater rates at its September 6, 2011 meeting. I strongly encourage you to move forward with these changes and stay in compliance with the TSO. The potential consequences for failing to comply with the

California Environmental Protection Agency

TSO include fines of up to \$10,000 per day and an order to cease additional connections to the City wastewater system.

If you have questions, please contact **Matthew Keeling at (805) 549-3685** (email mkeeling@waterboards.ca.gov), or Sheila Soderberg at (805) 549-3592.

Sincerely,



Roger W. Briggs
Executive Officer

CIWQS PLACE ID 247750

S:\Shared\NPDES\NPDES Facilities\San Luis Obispo Co\Paso Robles WWTP\2011 Renewal\R3-2011-0002\TSO R3-2011-0213\Prop 218 letter_08082011.doc

cc (electronic copies via email):

James App, City Manager, JApp@prcity.com

Doug Monn, City of Paso Robles, DMonn@prcity.com

Matt Thompson, City of Paso Robles MThompson@prcity.com

Kennedy/Jenks Consultants

2355 Main Street Suite 140
Irvine, CA 92614
949-261-1577
949-261-2134 (Fax)

City of Paso Robles
Wastewater Rate and
Revenue Analysis
Draft Report- August 2011

August 19, 2011

City of Paso Robles
Department of Public Works
1000 Spring Street
Paso Robles, CA

K/J Project No. 0983010*10

Kennedy/Jenks Consultants

Engineers & Scientists

2355 Main Street, Suite 140

Irvine, California 92614

949-261-1577

949-261-2134 (Fax)

19 August 2011

Mr. Doug Monn
Director of Public Works
City of Paso Robles
1000 Spring Street.
Paso Robles, California 93446

Subject: Draft Report - Wastewater Rate and Revenue Analysis
K/J 0983010*10

Dear Mr. Monn:

Kennedy/Jenks Consultants is pleased to submit the Draft Wastewater Rate and Revenue Analysis to the City of Paso Robles (City). By way of process, we have submitted this report as a digital ".pdf" file for your distribution within the City as appropriate.

This Rate Study Report is a compilation of the analysis and findings of the City's wastewater fund and incorporates the City's comments and direction obtained from previous draft work products and team discussions. The results of the study are intended to serve as a plan for future revenue and rate adjustments based on the projected costs, growth and capital improvement program requirements.

Foremost among the issues facing the City's wastewater utility is the need to comply with a Regional Water Quality Control Board Time Schedule Order by upgrading the City's wastewater treatment plant. This \$49 Million capital improvement project has a substantial impact on wastewater fund obligations, utility rates and facility charges. It is expected that the State Revolving Fund (SRF) Loan Program will be the source of funding for this project. However, since these funds are uncertain, the costs and impacts of conventional borrowing have also been developed, resulting in alternative financial scenarios and wastewater rates. Balancing this uncertainty with ratepayer impact is the principal component of the rate selection decision facing the City.

Please contact us if you have any questions or need additional information.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Roger Null, V.P.
Project Manager

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Section 1: Introduction

The City of Paso Robles (City) is a central coast community located in San Luis Obispo County. The City provides commonly sought services, including water and sewer services, to approximately 30,000 residents through 10,000 service connections. To provide a reliable wastewater collection, treatment and disposal system to its local customers, the City has been working on an implementation strategy that will meet the short and long-term financial obligations of the City's utility and provide for local program ratemaking objectives.

The City's wastewater system is made up of over 136 miles of pipelines supported by 14 sewer lift stations. These convey raw sewage to the City's 4.9 million gallon per day capacity wastewater treatment plant for treatment prior to discharge into the Salinas River. In addition, each of the 10,000 services is connected into the City system via individual customer laterals. The current annual budget to operate and maintain this system is approximately \$4.7 Million.

A foremost issue pertaining to the City wastewater system is the need for a treatment plant upgrade. The plant is 58 years old and in need of improvements to ensure environmentally sound discharges into the Salinas River and worker safety. Discharge standards are set by the Regional Water Quality Control Board (RWQCB) as stated in the City's NPDES permit. A public investment of \$50 Million is required to bring the treatment plant up to code and to comply with regulated discharge requirements. A copy of the RWQCB's most recent Time Schedule Order No. No. R3-2011-0213 for the City's wastewater treatment plant upgrade is provided in **Appendix A**. As noted in these documents, the City must:

- 1) Increase wastewater facility charges by November 1, 2011;
- 2) Introduce wastewater rates to the public by January 1, 2012;
- 3) Adopt wastewater rates by June 1, 2012, award the construction contract for the plant upgrade by February 1, 2013; and
- 4) Complete wastewater plant construction and be in full compliance with effluent limits by September 1, 2015.

In consideration of this regulatory order and other utility needs, the primary factors facing the City's wastewater utility are:

- Sustaining the current level of service to customers.
- Improving the City's treatment of wastewater.
- The need to operate the upgraded wastewater treatment plant, to provide additional staffing for a source control program, to fund capital improvements defined by the City's 2007 Sewer Collection System Master Plan, and to pay current and new debt obligations.
- To do all of the above in a financially responsible manner. This first means taking steps to save operational costs when possible. It also means charging sewer rates and new customer facility charges or connection fees such that all current and new customers pay their fair share.

Section 2: Historic and Current Conditions

2.1 Historic and Current Financial Condition

The financial condition of the City's wastewater utility was reviewed and a summary of financial performance is presented in **Table 1**. The information presented in this table was derived from the City's Comprehensive Annual Financial Reports (CAFRs) for the last two years. The CAFR for Fiscal Year (FY) 09-10 represents the most recent audited financial document of the wastewater utility's financial performance.

The financial condition of a wastewater utility is assessed by contrasting several financial parameters with the financial performance as reported in the City's CAFRs. Foremost among these parameters are criteria for net operating revenues and an assessment of the utility's fund balance. The findings related to each of these elements are provided as follows.

Net operating revenues are an important financial parameter of a utility's performance. This financial parameter is generally desired to be at least 20% of total operating revenues to generate adequate capital improvement funding for new and replacement (depreciation-based) assets. As shown in **Table 1**, the wastewater utility has fallen short of this parameter in the last three years and there has been a steady decline in operating financial performance. During this period, this parameter has ranged from a positive 15% in FY 07-08 to a negative 2% in FY 09-10¹. This parameter reflects the fact that the utility currently is not generating sufficient funds to provide for future capital expenditures and increased wastewater utility operating expenses.

In addition to this operational performance, the impact of various non-operating revenues and capital expenditures is also an important element of a financial assessment. While the City's wastewater fund balance has generally experienced a drawdown over the last several years, the FY 09-10 CAFR indicates that fund balance has approximately \$5.7 Million in cash and cash equivalents. This level of fund balance has enabled the utility to maintain its recent financial stability.

In consideration of these factors, as well as the integration of projected costs associated with financing and operating a new wastewater treatment plant, additional revenues from wastewater rates are warranted to improve the financial position of the wastewater fund. The following sections of this report provide the supporting information for the level and timing of proposed rate adjustments to meet the enterprise funds current and future financial requirements.

2.2 Current Accounts, Water Demands, and Wastewater Discharges

Data from the City's utility billing system provides information on the City's water and wastewater utility customers. As to be expected with the current economy, there has been little change in account activity (i.e. growth) over the last several years. Accordingly, the utility continues to be predominantly residential, being served water through 5/8" and 3/4" meters.

¹ FY = fiscal year which runs from July 1st through June 30th.

TABLE 1
HISTORICAL OPERATING REVENUES AND EXPENSES

Sources and Uses of Funds	Actuals		
	FY 07-08	FY 08-09	FY 09-10
Operating Revenues			
Charges for Service	\$4,367,772	\$4,495,292	\$4,535,599
Other	\$76,468	\$113,603	\$0
Total Operating Revenues	\$4,444,240	\$4,608,895	\$4,535,599
Operating Expenses			
Maintenance, Operations, & Administration	\$2,714,563	\$2,929,406	\$3,247,229
Depreciation and Amortization	\$1,063,311	\$1,109,724	\$1,377,291
Total Operating Expenses	\$3,777,874	\$4,039,130	\$4,624,520
Net Operating Income (Loss)	\$666,366	\$569,765	(\$88,921)
Net Op Rev as % of Total Op Rev	15%	12%	-2%
Non-Operating Revenue (Expense)			
Interest Revenue	\$553,906	\$246,712	\$113,757
Revenue from other Agencies	\$0	\$304,040	\$369,705
Sewer Connection Fees	\$401,690	\$240,548	\$156,551
Transfers In (Out)	(\$51,198)	(\$90,998)	(\$343,136)
Interest Expense	(\$352,393)	(\$334,983)	(\$329,520)
Total Non-Op Revenues (Exp.)	\$552,005	\$365,319	(\$32,643)
Net Income (Loss) Before Capital/Other Costs	\$1,218,371	\$935,084	(\$121,564)
Net Increase (Decrease) in Cash (a)	\$756,152	(\$6,698,334)	(\$230,924)
Beginning Cash and Equivalents	\$11,891,382	\$12,647,534	\$5,949,200
Ending Cash and Equivalents	\$12,647,534	\$5,949,200	\$5,718,276

Source: City of Paso Robles, Comprehensive Annual Financial Reports (CAFRs).

(a) Incorporates annual capital expenditures and other non-operating costs/financial adjustments per CAFRs.

Table 2 summarizes the City’s water demands and estimated wastewater discharges by customer class for FY 09-10.

**TABLE 2
CURRENT ACCOUNTS AND WASTEWATER DISCHARGES**

Customer Class	Accounts	Totals (Hcf)²
Single Family Residential (SFR) Customers	8,732	801,378
Multi-Family Residential (MFR) Customers	338	164,949
Non-Residential (Non-Res) Customers	690	365,271
Total	9,760	1,331,598

Source: City Finance Department & TJ Cross; FY 09-10 data.

Hcf = hundred cubic feet = 748 gallons/Hcf

Reflected in this data is that approximately 60% of the wastewater discharge is generated by the Single Family Residential (SFR) customer class. Since wastewater is not metered, the amount of water that is used in the winter is utilized to approximate the amount of wastewater generated by each SFR account. The use of winter water is a common approach for estimating SFR wastewater throughout the country.

Section 3: Future Revenue Requirements

This study examines future revenue requirements over the next five years. Future revenue requirements depend primarily on four specific areas:

- customer growth and wastewater discharges
- wastewater operations and maintenance costs
- necessary capital improvements
- meeting debt obligations

Some of these financial planning elements can be projected with relative certainty. Others are more speculative. For example, how accurate are the estimated costs of planned capital projects? What interest rate can the City expect to pay on future borrowing? How quickly will the economy recover?

One could project finances quite conservatively, putting in place wastewater rates that offer a safety net to the public. That approach, “Option A”, would enable the Wastewater Fund to afford variations in the key financial elements. By contrast, one could forecast more likely, foreseeable values in this regard and put in place rates that would be lower by comparison. This approach, “Option B”, would leave the fund more vulnerable to unanticipated costs.

² Hcf = hundred cubic feet, or 748 gallons of water.

Single Family Residential wastewater discharge is estimated as actual metered water usage from December-January-February period or actual throughout the year, whichever is less. Discharge from MFR customers and all non-residential customers equals water usage as metered each month.

To address these planning elements, two alternative revenue programs have been prepared. While these programs will have many elements in common, the cost implications of several key issues have been analyzed so that alternative funding requirements and ratepayer rates can be developed. The key risk and financial elements of these options is summarized in **Figure 1**. A discussion of these risk and revenue requirement elements is provided in the following sections.

FIGURE 1
SUMMARY OF KEY RISK AND FINANCIAL PLANNING ELEMENTS

Wastewater Fund Key Risk and Financial Elements	Option A	Option B
Buildout & Growth Provisions		
- Assumes slow growth conditions; buildout occurs well after 2025	✓	✓
- Assumes water sales continue at current levels	✓	✓
- Growth pays its fair share	✓	✓
Depreciation Funding Plan		
- Phased approach – Book Value depreciation fully funded by FY 18/19		✓
- Full Replacement Cost funding of depreciation by FY 13/14	✓	
WWTP Financing Plan		
- Assumes low cost SRF funds are available		✓
- Assumes conventional loan is required	✓	
WWTP Regulatory Compliance		
- Meets RWQCB Time Schedule Order	✓	✓
- Meets existing permit requirements	✓	✓
Additional Financial Considerations		
- Meets targeted operating reserves	✓	✓
- Includes other short-term fund balance needs	✓	✓
- Assumes modest future rate increases are required		✓
- Additional rate increases may not be needed	✓	

3.1 Projected Customer Growth and Wastewater Discharges

Customer growth (i.e., pace of adding new accounts) affects the revenue requirements of the City's utility in two ways. First, it increases the customer base that is paying for monthly service, and pays a capital facility charge or connection fee to buy into system capacity. Second, it increases the level of those costs that vary with the quantity of wastewater discharged such as power and chemicals. In financial planning, applying low to moderate growth factors provides a conservative assessment of future utility revenue requirements.

To assess an appropriate level of growth for this study, the City's annual growth for the last 30 years was analyzed. This trend analysis, combined with current economic factors, suggests a minimal level of additional growth in the next several years. Growth is expressed herein as an increase in equivalent dwelling units (EDUs). 1 EDU is equivalent to the average wastewater discharged from a single family residential (SFR) account. Based on the above analysis and discussions with City staff, current growth estimates for the duration of the five year planning period are provided below.

- FY 2011-12 44 Equivalent Dwelling Units
- FY 2012-13 44 Equivalent Dwelling Units
- FY 2013-14 44 Equivalent Dwelling Units
- FY 2014-15 63 Equivalent Dwelling Units
- FY 2015-16 85 Equivalent Dwelling Units
- FY 2015-16 129 Equivalent Dwelling Units

Note that an increase in new customer wastewater facility charges is also proposed which, if adopted, would increase the cost to connect into the sewer system. The magnitude of this increase is further discussed in Section 5.4.

In addition to the projection of new account growth, it is also important to project changes in water usage/wastewater discharges that may affect the utility's financial performance. This is particularly true for wastewater rate structures that are linked to customer water use. The City has implemented water conservation programs to improve the City's water supply/demand imbalance and to meet water conservation related regulations. Some of these conservation supportive measures as well as general public awareness may also affect interior water usage, which would reduce wastewater discharges in the City.

Future wastewater fund revenue requirements, then, relate to projections of the number of customers served and what portion of water usage ends up in the City sewer system. None of this can be derived as precise values. As such, future growth, demands, and discharge values used herein are to be considered as estimates only and are intended to provide a realistic yet conservative forecast of new customers so that facility charge revenues are not overestimated.

Similarly, while it can be assumed that increased utility rates will result in some reduction in water usage, behavioral changes cannot be quantified. Accordingly, the magnitude of future conservation included herein is only an estimate used for the purpose of projecting future costs and revenues. All of these factors will be evaluated and integrated in the City's ongoing rate and budget review process to evaluate the financial performance of the City's wastewater fund.

3.2 Budgeted/Projected Operating Expenses

Costs associated with the management, administration, and operations of the City's wastewater utility are accounted for in four Divisions. These are:

- Utility Billing and Cashiering (Division 127) - is responsible for the billing, accounting, and administration of the utility fund,
- Wastewater Collection (Division 163) - is responsible for the operation, maintenance, and management of the collection system,
- Wastewater Treatment (Division 164) - is responsible for the operation, maintenance, and management of the wastewater treatment plant, and
- Industrial Waste/Stormwater Program (Division 370) - is responsible for the control, permitting and management of industrial and illicit/illegal stormwater dischargers.

Staff has made every effort to minimize the cost of the wastewater treatment plant upgrade including:

- A comprehensive evaluation of the life-cycle cost and performance of various wastewater treatment plant upgrade alternatives. Biological Nutrient Removal requires the least capital improvement and has the lowest operation and maintenance costs (energy and chemical consumption, staffing) of all alternatives
- Incorporation of as much of the existing treatment equipment into the upgrade as feasible (e.g., primary clarifiers, solids digesters, chlorine contact chambers);
- Value Engineering by third parties to identify and incorporate cost-saving measures into the design;
- Phasing in of some equipment (e.g., blowers and air piping) to minimize up-front cost;
- Selection of the most energy-efficient features available (power and natural costs generally rise faster than inflation); and
- Constructability and biddability reviews by construction management specialists to eliminate ambiguities from the design.

As the wastewater treatment plant project moves forward, before going out to bid, staff will reach out to the contractor community to generate interest in the project. This strategy has resulted in good competition and lower than expected construction costs for other large public works projects.

Staff continues to operate and maintain the wastewater system with minimal staffing. Nights and weekends are covered by standby staff. Staff are trained for both operations and maintenance, and position vacancies have not been filled.

In addition to the proactive management of labor and other maintenance and operational costs, an important consideration in projecting operation and maintenance costs is the how much money should be budgeted (and funded) for the annual wear and tear of the wastewater systems assets. This annual estimate of wear and tear is commonly referred to as depreciation. While

depreciation is in the City's Comprehensive Annual Financial Reports (CAFRs), is consistent with generally accepted accounting principles (GAAP), and is developed in accordance with the requirements of Governmental Accounting Standards Board 34, it is an estimated cost, and is therefore not an actual cash expense. As previously noted in **Table 1**, the annual depreciation in FY 09-10 based on the book value of the City's wastewater assets is approximately \$1.3 Million. In contrast, annual depreciation based on the replacement cost of wastewater assets is estimated in the development of the City's Wastewater Facility Charges to be approximately \$2.5 Million per year. Both of these depreciation funding alternatives, as well as other actual and projected wastewater utility costs for the City's Wastewater Fund are shown in **Table 3**.

Note that had the Wastewater Fund been accumulating a depreciation fund over the years, there would be no need to incur the expense of borrowing money to upgrade the treatment plant. That is the value of funding depreciation.

As shown, wastewater fund operating costs are projected to increase at a modest level over the five year planning period. While most cost increases are inflationary in nature, some additional staff will be necessary to help operate the upgraded wastewater treatment plant and to support the City's Industrial Waste Pretreatment and Stormwater Management Program. Also of particular note is the need to begin repaying a new loan for the wastewater plant upgrade.

Regarding depreciation funding, had the City been funding depreciation (setting money aside at a level equal to annual depreciation estimates), the \$1.3 Million value (Option B) would be adequate to meet current replacement costs needs. Since the City has not historically increased rates at a level needed to fund annual depreciation, the \$2.5 Million value (Option A) more accurately reflects the true estimate of annual system wear and tear. The decision on the magnitude of annual depreciation that should be funded from rates at this time is a policy decision.

3.3 Projected Capital Improvement and Debt Service Financing Program

Utility systems are by nature capital intensive operations. To evaluate system capacity, regulatory compliance, and long range reliability, the City completed several system evaluations, studies, and designs in the last several years. These documents provided much of the basis for the development of the City's capital improvement program (CIP) for water, wastewater, and other City services.

The City's current wastewater system CIP is separated into two basic categories:

1. Wastewater Collection System Improvements and
2. Wastewater Treatment Plant Improvements.

Consistent with the other utility system planning, capital projects are spread over 16 years (i.e. through 2025) to minimize ratepayer impact as much as possible. The wastewater rates proposed herein are to cover costs over a 5-year period. **Table 4** lists the planned capital projects over the 5 year rate period. A comprehensive listing of the specific projects included in the City's 16-year CIP is provided in **Appendix B**.

**TABLE 3
CURRENT AND PROJECTED MAINTENANCE AND OPERATIONS EXPENSES**

Description	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<u>Projected Wastewater Collection Costs - Div 163</u>							
Div 163 M & O Costs	\$524,500	\$526,700	\$542,100	\$560,300	\$585,300	\$612,100	\$641,100
Div 163 Labor	\$652,600	\$694,600	\$722,400	\$751,300	\$802,100	\$834,200	\$867,600
Div 163 Misc Capital	\$217,400	\$8,800	\$0	\$114,100	\$119,800	\$125,800	\$132,100
Total Div 163 Operating Costs	\$1,394,500	\$1,230,100	\$1,264,500	\$1,425,700	\$1,507,200	\$1,572,100	\$1,640,800
<u>Projected Wastewater Treatment Costs - Div 164</u>							
Div 164 M & O Costs	\$1,317,700	\$1,390,200	\$1,490,200	\$1,237,000	\$1,300,900	\$1,480,400	\$1,566,200
RWQCB Fines/Penalties	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
Div 164 Labor	\$467,700	\$502,300	\$628,500	\$994,900	\$1,156,900	\$1,203,200	\$1,353,100
Div 164 Misc Capital	\$21,900	\$30,000	\$40,600	\$57,300	\$60,200	\$63,200	\$66,400
Total Div 164 Operating Costs	\$1,807,300	\$1,962,500	\$2,199,300	\$2,329,200	\$2,558,000	\$2,786,800	\$2,985,700
<u>Projected Industrial Waste/Stormwater Program Costs - Div 370</u>							
Div 370 M & O Costs	\$92,800	\$95,300	\$101,200	\$105,000	\$108,000	\$111,100	\$114,300
Div 370 Labor	\$250,800	\$260,800	\$271,300	\$282,100	\$293,400	\$439,100	\$456,700
Div 370 Misc Capital	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Div 370 Operating Costs	\$343,600	\$356,100	\$372,500	\$387,100	\$401,400	\$550,200	\$571,000
<u>Charges From Other Depts (Div. 127)</u>							
Total Div. 127 Charges	\$589,800	\$613,400	\$638,000	\$663,500	\$690,100	\$717,700	\$746,400
<u>Depreciation Funding (a)</u>							
Option A	\$0	\$0	\$2,613,500	\$2,850,700	\$3,230,300	\$3,613,900	\$3,803,000
Option B	\$0	\$0	\$0	\$1,231,900	\$1,241,900	\$1,255,900	\$1,274,400
<u>Total WW Div O&M Costs (b)</u>							
Option A	\$4,135,200	\$4,162,100	\$7,087,800	\$7,656,200	\$8,387,000	\$9,240,700	\$9,746,900
Option B	\$4,135,200	\$4,162,100	\$4,474,300	\$6,037,400	\$6,398,600	\$6,882,700	\$7,218,300

Source: City of Paso Robles Wastewater/Finance Divisions and Kennedy Jenks. The wastewater treatment plant upgrade is scheduled to be completed in FY 15-16.

(a) Depreciation is included herein based on depreciation funding policy, as derived and reflected in Tables 5A and 5B.

(b) Total costs do not include existing or new debt service obligations.

**TABLE 4
PROPOSED CAPITAL IMPROVEMENT & DEBT FINANCING PROGRAM**

Description	PROJECTED						
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
<u>Wastewater System Capital Improvement Program</u>							
Collection Pipelines and Pumping Facilities	\$1,308,900	\$1,279,500	\$737,000	\$746,500	\$1,047,200	\$1,384,100	\$1,132,600
Wastewater Treatment Facilities	\$1,871,800	\$0	\$9,097,000	\$14,782,700	\$14,782,700	\$6,822,800	\$0
Total Wastewater Fund CIP	\$3,180,700	\$1,279,500	\$9,834,000	\$15,529,200	\$15,829,900	\$8,206,900	\$6,703,600
<u>Wastewater System Debt Financing Program</u>							
New Debt Issuances (a)	\$0	\$0	\$11,368,800	\$14,782,700	\$14,782,700	\$6,822,800	\$0
New Annual Debt Service (b)	\$0	\$0	\$0	\$0	\$0	\$0	\$3,329,900
TCSD's Share of New Debt (b)	\$0	\$0	\$0	\$0	\$0	\$0	\$299,700
Net City Share of New Annual Debt Service (b)	\$0	\$0	\$0	\$0	\$0	\$0	\$3,030,200
Existing Annual Debt Service	\$527,300	\$525,600	\$523,200	\$525,400	\$527,000	\$522,600	\$523,000

CIP Source: City of Paso Robles, April 2011.

(a) New debt issuance of \$47.75 Million is scheduled for FY 12-13. Values shown are used to demonstrate annual use of funds, with the WWTP complete in FY 15-16.

(b) Value shown is for Option B, which reflects new SRF debt service and TCSD's share. See Table 5A for debt associated with a conventional loan.

As previously discussed, a critical element of the capital improvement program is the design and construction of the upgraded wastewater treatment plant. As a regulatory driven project, the City is seeking financial assistance from the State of California through a loan from the State Revolving Fund (SRF). Through SRF financing, the City is able to obtain funds at a very low interest rate (likely 3.4%, 20-year term), saving ratepayers several million dollars in interest costs. The SRF program has reviewed the City's credit and has pre-approved a loan for the upgrade project. While there are additional administrative provisions associated with SRF financing that will impact City staff, the interest cost savings far out-weigh that consideration. Since current information suggests that SRF funds will be available, SRF financing is reflected in the revenue plan requirements of Option B.

On the other hand, there is no guarantee that a low-interest State loan will be available. To provide a financial safety net, a financial scenario was developed that presumes SRF funding will not be available. Under this condition, conventional borrowing will be required to upgrade the wastewater treatment plant at higher interest rates, increased annual debt service payments, and an accelerated need for increased revenues to meet those costs (see Option A).

In addition to procuring new debt, the City borrowed money in the past to make wastewater system improvements. In 2002, money was borrowed to make collection and treatment improvements. The principal amount outstanding on this loan is approximately \$7.1 Million, with an annual debt service obligation of approximately \$525,000. See **Appendix B** for more detail.

3.4 Projected Revenue Requirements Using Proposed Rates

To assess the financial implications of the wastewater fund programs and costs, an annualized revenue plan has been prepared. This plan integrates utility system operating and capital costs, debt obligations, and depreciation funding with projected growth and wastewater discharge criteria.

Two alternative revenue programs have been prepared – one that generates sufficient revenue to address a variety of conditions (such as higher interest borrowing, funding depreciation earlier, etc.) and one based on foreseeable conditions (such as lower interest SRF financing). As expected, additional revenues are needed under either financial scenario. Accordingly, a projected revenue plan using proposed rates and new customer fees is prepared to balance the fund. The resulting alternative revenue plans and the associated average rates needed to fund the wastewater system costs under the developed risk and financial profiles are shown in **Tables 5A** and **5B**.

In both scenarios, annual rate increases are proposed over the next four to five years along with increased facility charges (connection fees). Additionally, the wastewater fund balance is projected to drop to as low as \$2.3 Million over the next few years until revenues increase. While this value is below the target reserve level and does increase the City's financial risks, it appears to be an acceptable level during this period of rate adjustment transition. As a precautionary note, budgeted capital expenditures for FY 11-12 are very limited to preserve fund balance.

**TABLE 5A
PROJECTED REVENUE PLAN @ PROPOSED WASTEWATER RATES - OPTION A**

Description	Estimated			Projected			
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Revenues							
Fixed Monthly Service Charges (Current Structure, Per DU/Acct)	\$4,091,900	\$4,105,300	\$2,059,300	\$0	\$0	\$0	\$0
Consumption Charges (Current Structure, Non-res only)	\$313,000	\$312,100	\$155,800	\$0	\$0	\$0	\$0
TCSD WW O&M Charges	\$179,600	\$191,100	\$207,900	\$220,600	\$241,500	\$273,100	\$295,400
Consumption Charges, New Structure	\$0	\$0	\$3,625,500	\$9,603,400	\$12,737,100	\$14,100,800	\$14,237,200
Miscellaneous Revenues	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000
Total Operating Revenues	\$4,704,500	\$4,728,500	\$6,168,500	\$9,944,000	\$13,098,600	\$14,493,900	\$14,652,600
Operating Expenses							
WW Collection System	\$1,394,500	\$1,230,100	\$1,264,500	\$1,425,700	\$1,507,200	\$1,572,100	\$1,640,800
WW Treatment	\$1,807,300	\$1,962,500	\$2,199,300	\$2,329,200	\$2,558,000	\$2,786,800	\$2,985,700
Industrial Waste/Stormwater Program	\$343,600	\$356,100	\$372,500	\$387,100	\$401,400	\$550,200	\$571,000
Charges From Other Depts. (Div 127)	\$589,800	\$613,400	\$638,000	\$663,500	\$690,100	\$717,700	\$746,400
Depreciation			\$2,613,500	\$2,850,700	\$3,230,300	\$3,613,900	\$3,803,000
Total Operating Expenses	\$4,135,200	\$4,162,100	\$7,087,800	\$7,656,200	\$8,387,000	\$9,240,700	\$9,746,900
Net Operating Revenue	\$569,300	\$566,400	(\$919,300)	\$2,287,800	\$4,711,600	\$5,253,200	\$4,905,700
Non-Operating Revenue (Expense)							
Interest Revenue (Excludes Interest on Bond Funds)	\$228,700	\$124,400	\$102,500	\$102,500	\$102,500	\$417,800	\$200,500
Wastewater Connection Fee Revenues	\$117,400	\$567,600	\$567,600	\$567,600	\$812,700	\$1,096,500	\$1,664,100
Existing Debt	(\$527,300)	(\$525,600)	(\$523,200)	(\$525,400)	(\$527,000)	(\$522,600)	(\$523,000)
New Debt Service (Excludes TCSD's Share) (a)				(\$3,523,800)	(\$3,523,800)	(\$3,523,800)	(\$3,523,800)
Total Non-Op Revenues/Expenses	(\$181,200)	\$166,400	\$146,900	(\$3,324,043)	(\$3,080,543)	(\$2,477,043)	(\$2,127,143)
Net Income Before Capital Activity							
Capital Expenditures	\$3,180,700	\$1,279,500	\$9,834,000	\$15,529,200	\$15,829,900	\$8,206,900	\$1,132,600
Capital Financing (a)			\$55,057,000				
Estimated Bond Proceeds (a)			\$49,251,300				
Net Change in Funds Avail. After Capital Activity	(\$1,983,413)	(\$546,700)	\$38,644,900	(\$16,565,400)	(\$14,198,800)	(\$5,430,700)	\$1,646,000
Beginning Cash Balance (b)	\$5,718,300	\$3,109,900	\$2,563,200	\$41,208,100	\$24,642,700	\$10,443,900	\$5,013,200
Ending Cash Balance (b)	\$3,109,900	\$2,563,200	\$41,208,100	\$24,642,700	\$10,443,900	\$5,013,200	\$6,659,200
Target Reserve Fund (c)	\$5,595,000	\$5,607,000	\$7,067,000	\$10,877,000	\$11,244,000	\$11,667,000	\$11,920,000
Debt Service Coverage Ratio (Excludes Connection Fee Revs)	1.51	1.31	3.43	1.31	2.00	2.31	2.22

Description	Proposed Rates & Projected Changes in Accounts/Billable Water Usage/WW Discharges						
	na	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Proposed Fixed Rate Increase	na	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Proposed Usage Rate Increase (d)	na	0.0%	32%	32.0%	32.0%	10.0%	0.0%
Proposed Average Usage Unit Rate (\$/HCF) (July 1, each Year)	\$0.00	\$0.00	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
Estimated Connection Fee (Effective 7-1 each year)	\$5,467	\$12,900	\$12,900	\$12,900	\$12,900	\$12,900	\$12,900
Growth Based Changes in Accounts							
Increase in EDUs, New Slow Scenario Growth (June 2011)	21	44	44	44	63	85	129
Total Billable W/Sewer (Hcf), New SFR Winter Water Alt.	1,333,793	1,338,290	1,342,788	1,347,285	1,353,724	1,362,412	1,375,597

Notes: Projection is based on new June 2011 slow growth scenario. CDCR's 483 EDUs are projected to occur in FY 17-18
(a) Financing assumes SRF is not available. Conventional Loan is 30 yrs @ 5.7% interest; no capitalized interest. Bond proceeds are less bond reserves and cost of issuance.
(b) FY 10-11 beginning Fund Balance per CAFR, preliminary estimated actuals per City Finance (July 2011), including funds reserved for other potential liabilities.
(c) Target Reserve Fund Criteria: Operating/Rate Stabilization @ 50% of Op Exp., CIP/Emergency @ \$3 M, & Debt Reserve @ one year's debt service.
(d) Percent rate increases for FY FY 12-13 are based on projected increase in revenues as we convert from all fixed to all variable rates.

**TABLE 5 B
PROJECTED REVENUE PLAN @ PROPOSED WASTEWATER RATES - OPTION B**

Description	Estimated			Projected			
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Revenues							
Fixed Monthly Service Charges (Current Structure, Per DU/Acct)	\$4,091,900	\$4,105,300	\$2,059,300	\$0	\$0	\$0	\$0
Consumption Charges (Current Structure, Non-res only)	\$313,000	\$312,100	\$155,800	\$0	\$0	\$0	\$0
TCSD WW O&M Charges	\$179,600	\$191,100	\$207,900	\$220,600	\$241,500	\$273,100	\$295,400
Consumption Charges, New Structure	\$0	\$0	\$3,021,300	\$7,275,300	\$8,530,900	\$10,019,500	\$10,723,400
Miscellaneous Revenues	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000
Total Operating Revenues	\$4,704,500	\$4,728,500	\$5,564,300	\$7,615,900	\$8,892,400	\$10,412,600	\$11,138,800
Operating Expenses							
WW Collection System	\$1,394,500	\$1,230,100	\$1,264,500	\$1,425,700	\$1,507,200	\$1,572,100	\$1,640,800
WW Treatment	\$1,807,300	\$1,962,500	\$2,199,300	\$2,329,200	\$2,558,000	\$2,786,800	\$2,985,700
Industrial Waste/Stormwater Program	\$343,600	\$356,100	\$372,500	\$387,100	\$401,400	\$550,200	\$571,000
Charges From Other Depts. (Div 127)	\$589,800	\$613,400	\$638,000	\$663,500	\$690,100	\$717,700	\$746,400
Depreciation			\$0	\$1,231,900	\$1,241,900	\$1,255,900	\$1,274,400
Total Operating Expenses	\$4,135,200	\$4,162,100	\$4,474,300	\$6,037,400	\$6,398,600	\$6,882,700	\$7,218,300
Net Operating Revenue	\$569,300	\$566,400	\$1,090,000	\$1,578,500	\$2,493,800	\$3,529,900	\$3,920,500
Non-Operating Revenue (Expense)							
Interest Revenue (No interest on SRF Funds)	\$228,700	\$124,400	\$92,700	\$193,500	\$232,600	\$306,200	\$420,400
Wastewater Connection Fee Revenues	\$117,400	\$321,200	\$400,400	\$479,600	\$686,700	\$926,500	\$1,406,100
Existing Debt	(\$527,300)	(\$525,600)	(\$523,200)	(\$525,400)	(\$527,000)	(\$522,600)	(\$523,000)
New Debt Service (Excludes TCSD's Share) (a)							(\$3,030,200)
Total Non-Op Revenues/Expenses	(\$181,200)	(\$80,000)	(\$30,100)	\$147,700	\$392,300	\$710,100	(\$1,726,700)
Net Income Before Capital Activity	\$388,100	\$486,400	\$1,059,900	\$1,726,200	\$2,886,100	\$4,240,000	\$2,193,800
Capital Expenditures	\$3,180,700	\$1,279,500	\$9,834,000	\$15,529,200	\$15,829,900	\$8,206,900	\$1,132,600
Capital Financing (a)							
Bond Reserve Fund Requirement			\$11,368,800	\$14,782,700	\$14,782,700	\$6,822,800	\$3,030,200
Net Change in Funds Avail. After Capital Activity	(\$1,983,413)	(\$793,100)	\$2,519,700	\$979,700	\$1,838,900	\$2,855,900	(\$1,969,000)
Beginning Cash Balance (b)	\$5,718,300	\$3,109,900	\$2,316,800	\$4,836,500	\$5,816,200	\$7,655,100	\$10,511,000
Ending Cash Balance (b)	\$3,109,900	\$2,316,800	\$4,836,500	\$5,816,200	\$7,655,100	\$10,511,000	\$8,542,000
Target Reserve Fund (c)	\$5,595,000	\$5,607,000	\$5,760,000	\$6,544,000	\$6,726,000	\$6,964,000	\$10,162,000
Debt Service Coverage Ratio (Excludes Connection Fee Revs)	1.51	1.31	2.26	5.72	7.53	9.74	1.58

Description	Proposed Rates & Projected Changes in Accounts/Billable Water Usage/WW Discharges						
Proposed Fixed Rate Increase	na	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Proposed Usage Rate Increase (d)	na	0.0%	18%	20.0%	16.7%	16.7%	6.0%
Proposed Average Usage Unit Rate (\$/HCF) (July 1, each Year)	\$0.00	\$0.00	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
Estimated Connection Fee (Effective 7-1 each year)	\$5,467	\$7,300	\$9,100	\$10,900	\$10,900	\$10,900	\$10,900
Growth Based Changes in Accounts							
Increase in EDUs, New Slow Scenario Growth (June 2011)	21	44	44	44	63	85	129
Total Billable W/Sewer (Hcf), New SFR Winter Water Alt.	1,333,793	1,338,290	1,342,788	1,347,285	1,353,724	1,362,412	1,375,597

Notes: Projection is based on new June 2011 slow growth scenario. CDCR's 483 EDUs are projected to occur in FY 17-18
(a) New \$47.45 M SRF loan in FY 12-13, values used to demonstrate annual use of funds, WWTP complete in FY 15-16, debt begins FY 16-17. TCSD's 9% share excluded.
(b) FY 10-11 beginning Fund Balance per CAFR, preliminary estimated actuals per City Finance (July 2011), including funds reserved for other potential liabilities.
(c) Target Reserve Fund Criteria: Operating/Rate Stabilization @ 50% of Op Exp., CIP/Emergency @ \$3 M, & Debt Reserve @ one year's debt service.
(d) Percent rate increases for FY FY 12-13 are based on projected increase in revenues as we convert from all fixed to all variable rates.

It should be noted that in addition to the increase in rates needed to fund the existing customers' share of system costs, the financial plan also integrates growth's share of system costs; most notably the upgraded treatment plant costs. To quantify growth's cost obligations, a Wastewater Facility Charge Report was prepared. The City's wastewater facility charges (connection fees) are scheduled to increase from \$5,467 per EDU to \$12,900, or \$10,900 per EDU for Option A or B, respectively. These charges are shown in the bottom of **Tables 5A or 5B**, as appropriate.

To manage future uncertainties, the City should develop and maintain a series of reserves to buffer the impact of unforeseen expenses, dips in billable water use, emergencies, or other financial circumstance. A dedicated "Rate Stabilization Fund" is one such fund that should be developed to supplement other dedicated reserve funds to manage the City's financial risk of uncertainty. Typical fund reserve criteria that appear applicable to the City's wastewater fund are also reflected in **Tables 5A and 5B**. The Target Reserve Fund enumerated on **Tables 5A and 5B** is based on the following criteria:

- Operating Reserve plus Rate Stabilization Fund Reserve - 50% of Operating Expenses (25% each);
- Capital Fund and Emergency Reserve - \$3 Million, and Debt Reserve – per covenant, or 1 year's total debt, whichever is greater.

A discussion of the City's current and proposed rates and rate structure is provided in the following sections.

Section 4: Current Wastewater Rates

Historically, the City's wastewater rates have been very low, as the public benefited from a low cost service and purposefully minimized capital and operational expenditures. The wastewater treatment plant, for example, served the citizens for many decades without major process improvements. Keeping utility rates low meant that a "depreciation fund" to replace aging system components such as the treatment plant was not fully funded. Consequently, the City will need to borrow money to upgrade the plant.

Increases in wastewater rates and facility charges (connection fees) are needed to meet financial obligations of the Wastewater Enterprise.

The City's current wastewater rates structure has been in place since 2004 and is similar to many other communities throughout the country. The primary element of the current rate structure is a fixed rate per unit for all customers. This charge annually generates over 85% of the wastewater utility's operating revenues and recognizes that most of the systems costs are fixed. To a much smaller degree, non-residential customers are also charged a variable rate, based on the amount of water used on a monthly basis. For this rate element, non-residential customers are also credited five hundred cubic feet (Hcf) before the variable rate commences. The characteristics of the present rate structure are provided in **Table 6**.

**TABLE 6
CURRENT WASTEWATER RATES**

Charge Description	Unit Rate	Customer Class
Monthly Fixed Charge/Unit ^(a)	\$25.86	(Applies to all customer classes)
Variable Rate for Non-Residential Only (Applies to water usage beyond 5 Hcf/Unit)	\$1.20/Hcf	Non-Residential Only

(a) Where: Unit is dwelling, hotel room, non-residential occupied units, etc...

Source: City of Paso Robles; Rates effective July 1, 2004.

Section 5: Proposed Wastewater Rates

Proposed rates have been developed to meet the revenue and rate restructuring requirements of the City's wastewater utility. As indicated in Section 3, revenues now generated from wastewater rates are approximately \$4.6 Million per year. When the wastewater plant is fully operational and new debt obligations are realized, approximately \$11 to \$14 Million will be needed annually to continue wastewater system operations. Development of the proposed rates, derivation of associated typical monthly bills, and a comparison of wastewater charges in other communities follow.

5.1 Development of Proposed Rates

Wastewater rates are proposed to support the financial health of the community's wastewater utility system over the coming five years. Refer to Section 3 for future revenue requirements.

There is a wide range of pricing strategies that could be followed to generate the funds needed to meet the City's financial obligations, including:

- Fixed Rates:** Charge a fixed amount for all residential customers, regardless of estimated wastewater discharge levels. This pricing strategy is certainly easy to administer, but fails to recognize variations in demand on the wastewater system by larger users. As is the case for all wastewater utilities, 70 to 80 percent of the costs to operate and manage the City's system is essentially fixed (i.e. does not vary with flow). While fixed revenue benefits a utility's financial stability, it does have some negative aspects; this rate element typically inhibits low volume customers' ability to reduce their utility bill and does not support water conservation. As such, reducing or eliminating the City's fixed charge would mitigate these rate issues. Eliminating the fixed charge however, means the variable charge will need to recover all of the system's costs; currently, essentially all of the wastewater utility's costs are derived from the fixed monthly charge.

- Pay for What You Use: Structure wastewater service billing according to actual wastewater generation. This “pay for what you use” principle is the same that has been adopted for the water utility. It is familiar, more closely linked to actual flows into the system, but does require some customers’ billings be based on usage during non-irrigation months to avoid charging for water usage that doesn’t enter the wastewater system. By eliminating the fixed charge, low volume customers have a new opportunity to significantly reduce their monthly water bills. Charging based solely on water usage is the purest form of the “pay for what you use” approach.
- Conservation Pricing: Charge tiered rates such that larger dischargers pay more for higher volumes of discharge. This pricing strategy supports water conservation and community understanding. There would be a stronger case for this type of wastewater billing structure if City water bills were also structured in this tiered fashion.
- Adherence to Cost of Service Requirements. Foremost among rate restructuring considerations is the need to recover the costs associated with providing service to its customers in a fair and equitable manner. These “fair and equitable” guidelines have been an element of wastewater charges for over 40 years through the original provisions of the Federal Clean Water Act, and administered by the State Water Resources Control Board. The primary requirements of these cost of service provisions is the need for non-domestic dischargers to pay for any additional strength that is treated at the local publicly owned treatment works. Since provisions of the City’s Source Control Ordinance prohibits non-domestic customers from discharging sewage that is in excess of domestic strength, excess strength costs are not an element of customer classification costs. As a result, the allocation and recover of the costs of service is simplified as it is limited to the amount of wastewater that is discharged. Like most communities, the City estimates this value for each customer through an interpretation of its metered water use.

In consideration of the above, a Pay for What You Use structure is recommended. Accompanying this decision is the realization that the shift from an all-fixed to an all-variable rate structure may affect the financial stability of the wastewater enterprise and adversely affect some of the City’s customers. From a financial stability perspective, the benefits of the all-variable rate outweighed the financial risk. Additional discussion of typical customer bills is provided in Section 5.3.

5.2 Development of Proposed Usage Charges

Usage charges have been developed based on the revenue requirements shown in **Tables 5A** and **5B**, and the projected metered water usage that is estimated to be wastewater. Given our recent community input for water rates, a similar uniform rate structure is proposed for wastewater. The elimination of the fixed charge requires an adjustment of the usage rates to cover costs, and will also help promote water conservation.

The proposed usage charges for the five-year rate period for the financial scenarios developed in Section 3 are shown in **Table 7**.

**TABLE 7
PROPOSED UNIFORM WASTEWATER USAGE RATES**

User Class (All Customers)	Usage Charge \$/HCF				
	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
Option A					
All Water Usage	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
Option B					
All Water Usage	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80

As previously discussed, alternative wastewater rates have been developed:

- A. One to position the Wastewater Fund with a safety net that would enable the Fund to afford variations in the key financial elements.
- B. Another based on foreseeable values in this regard that would leave the fund more vulnerable to unanticipated costs.

In either case, it is recommended that new rates and rate schedules be effective July 1st of each fiscal year. Should rate discussions and other considerations not allow full adoption by July 1, 2012, the initial increase should proceed as soon thereafter as possible. All subsequent increases should proceed at the beginning of the new fiscal year.

Basing customer wastewater bills on water usage poses a key question -- "Will I be billed for irrigation water that does not flow to the sewer?" No. The proposed billing structure would work like this.

- Single Family Residences (SFR): Customer bills will be based on metered "Winter Water Use" from the previous December-January-February billing period. In other words, a customer's metered water use during that 3 month period will establish the cap for the remainder of the year's wastewater billing. If actual water use in any month is less than a customer's Winter Water Use, billing would be based on the actual, lower amount. Very low Winter Water Use (2 Hcf/month or less) will take into account two Winter Water Use periods. For new services and accounts that change occupancy, the initial year's billing will be based on 7 Hcf/month, the current SFR median Winter Water Usage.
- Apartment Buildings: Many apartment and condominium complexes have separate irrigation meters for the common area landscape such that year-round, metered water use for the main apartment building is representative of interior water usage. For this

reason, apartments' and condominium wastewater billing will be based on monthly water usage. Apartments and condominiums that currently combine interior water use with exterior landscaping requirements have the option of separating these onto separate water meters if desired.

- Non-Residential Customers: Businesses, hotels, schools, and other non-residential customers' wastewater bills will be based on monthly water usage. The primary reason for this is that annual water usage is commonly reflective of the level of business activity and wastewater discharge. Businesses, like apartment buildings, also have the option of serving irrigation needs through a separate irrigation meter. Other businesses consume high volumes of water in the course of daily business but discharge lesser amounts into the sewer. To address this customer category, dischargers that average more than 10,000 gallons per day water usage may petition the City to estimate their discharge by another means and have their wastewater bill based on that alternate means.
- Landscape and Fire Service Meters: Approximately 312 of the 10,000 water accounts throughout the City are classified as Landscape or Fire Service meters, neither of which results in discharge to the sewer. These accounts will not be billed for wastewater service.
- Septic Systems: Approximately 300 of the City's 10,000 water accounts have septic systems and are not connected to the City sewer system. These accounts will not be billed for wastewater service.

The rates outlined herein are intended to fund the essential wastewater treatment plant upgrade and other capital needs to serve existing customers, meet the wastewater fund's current and future debt service requirements, provide the necessary funds for ongoing system management and operation and return the fund to a desired level of financial stability. The alternative rates also support the City's key goals of anticipating regulatory requirements and preparing for future production of recycled water. This rate structure is also consistent with the City's "pay-for-what-you-use" philosophy.

5.3 Comparison of Monthly Bills

Typical customer bills are often developed to evaluate the impact of a wastewater rate schedule on a utility's customers. Current typical bills are derived by correlating the current schedule of charges shown in **Table 6** with the average or typical consumption values for various customer types. **Tables 8A** and **8B** reflect the resulting impacts of the alternative rate increases over the five year planning period for each of the developed financial scenarios.

As shown, the calculated typical bills for the small volume water user for both alternative plans are essentially less than the current all fixed rate. Larger dischargers are expected to experience larger increases in their wastewater bills as the proposed rate increases are implemented to recover the City's costs of service. Thus, balancing the impact of the rates reflected in these tables with the risks and implicit system reliability associated with each financial option is the principal component of the rate selection decision facing the City.

TABLE 8A
TYPICAL WASTEWATER BILLS
OPTION A

Proposed Wastewater Rates
Sample Bill Table - Single Family Residential

Units (HCF)	Current Bill (\$25.86 per home)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0	\$0	\$0	\$0	\$0 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$25.86	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
2		\$10.80	\$14.26	\$18.82	\$20.70	\$20.70
3		\$16.20	\$21.39	\$28.23	\$31.05	\$31.05
25th percentile==> 4		\$21.60	\$28.52	\$37.64	\$41.40	\$41.40
5		\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
6		\$32.40	\$42.78	\$56.46	\$62.10	\$62.10
50th percentile==> 7		\$37.80	\$49.91	\$65.87	\$72.45	\$72.45
8		\$43.20	\$57.04	\$75.28	\$82.80	\$82.80
75th percentile==> 9		\$48.60	\$64.17	\$84.69	\$93.15	\$93.15
10		\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
11		\$59.40	\$78.43	\$103.51	\$113.85	\$113.85
12		\$64.80	\$85.56	\$112.92	\$124.20	\$124.20
13		\$70.20	\$92.69	\$122.33	\$134.55	\$134.55
14		\$75.60	\$99.82	\$131.74	\$144.90	\$144.90
15		\$81.00	\$106.95	\$141.15	\$155.25	\$155.25

Proposed Wastewater Rates
Sample Bill - Small Business Example

Units (HCF)	Current Bill* (small business w/ 1 EDU)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$25.86	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
5	\$25.86	\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
10	\$31.86	\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
15	\$37.86	\$81.00	\$106.95	\$141.15	\$155.25	\$155.25
20	\$43.86	\$108.00	\$142.60	\$188.20	\$207.00	\$207.00
25	\$49.86	\$135.00	\$178.25	\$235.25	\$258.75	\$258.75
30	\$55.86	\$162.00	\$213.90	\$282.30	\$310.50	\$310.50

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Proposed Wastewater Rates
Sample Bill - 4 Unit Motel Example

Units (HCF)	Current Bill* (4 unit motel)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$5.40	\$7.13	\$9.41	\$10.35	\$10.35 \$ per HCF
1	\$103.44	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35
5	\$103.44	\$27.00	\$35.65	\$47.05	\$51.75	\$51.75
10	\$103.44	\$54.00	\$71.30	\$94.10	\$103.50	\$103.50
15	\$103.44	\$81.00	\$106.95	\$141.15	\$155.25	\$155.25
20	\$103.44	\$108.00	\$142.60	\$188.20	\$207.00	\$207.00
25	\$109.44	\$135.00	\$178.25	\$235.25	\$258.75	\$258.75
30	\$115.44	\$162.00	\$213.90	\$282.30	\$310.50	\$310.50

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Note: Highlighted bills are less than the current rates.

TABLE 8B
TYPICAL WASTEWATER BILLS
OPTION B

Proposed Wastewater Rates
Sample Bill Table - Single Family Residential

Units (HCF)	Current Bill (\$25.86 per home)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0	\$0	\$0	\$0	\$0 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$25.86	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
2		\$9.00	\$10.80	\$12.60	\$14.70	\$15.60
3		\$13.50	\$16.20	\$18.90	\$22.05	\$23.40
25th percentile==> 4		\$18.00	\$21.60	\$25.20	\$29.40	\$31.20
5		\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
6		\$27.00	\$32.40	\$37.80	\$44.10	\$46.80
50th percentile==> 7		\$31.50	\$37.80	\$44.10	\$51.45	\$54.60
8		\$36.00	\$43.20	\$50.40	\$58.80	\$62.40
9		\$40.50	\$48.60	\$56.70	\$66.15	\$70.20
10		\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
11		\$49.50	\$59.40	\$69.30	\$80.85	\$85.80
12		\$54.00	\$64.80	\$75.60	\$88.20	\$93.60
13		\$58.50	\$70.20	\$81.90	\$95.55	\$101.40
14		\$63.00	\$75.60	\$88.20	\$102.90	\$109.20
15		\$67.50	\$81.00	\$94.50	\$110.25	\$117.00

Proposed Wastewater Rates
Sample Bill - Small Business Example

Units (HCF)	Current Bill* (small business w/ 1 EDU)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$25.86	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
5	\$25.86	\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
10	\$31.86	\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
15	\$37.86	\$67.50	\$81.00	\$94.50	\$110.25	\$117.00
20	\$43.86	\$90.00	\$108.00	\$126.00	\$147.00	\$156.00
25	\$49.86	\$112.50	\$135.00	\$157.50	\$183.75	\$195.00
30	\$55.86	\$135.00	\$162.00	\$189.00	\$220.50	\$234.00

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Proposed Wastewater Rates
Sample Bill - 4 Unit Motel Example

Units (HCF)	Current Bill* (4 unit motel)	Proposed Monthly Bill				
		7/1/2012	7/1/2013	7/1/2014	7/1/2015	7/1/2016
		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 fixed per month
		\$4.50	\$5.40	\$6.30	\$7.35	\$7.80 \$ per HCF
1	\$103.44	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80
5	\$103.44	\$22.50	\$27.00	\$31.50	\$36.75	\$39.00
10	\$103.44	\$45.00	\$54.00	\$63.00	\$73.50	\$78.00
15	\$103.44	\$67.50	\$81.00	\$94.50	\$110.25	\$117.00
20	\$103.44	\$90.00	\$108.00	\$126.00	\$147.00	\$156.00
25	\$109.44	\$112.50	\$135.00	\$157.50	\$183.75	\$195.00
30	\$115.44	\$135.00	\$162.00	\$189.00	\$220.50	\$234.00

* Basis of current billing is \$25.86 per EDU with 5 HCF/EDU free of charge, then \$1.20/EDU thereafter.

Note: Highlighted bills are less than the current rates.

5.4 Comparison of Monthly Bills with Other Communities

In addition to the development of typical bills for City customers, **Figure 2** provides a comparison of the City's current and alternative monthly single-family bills with other Central Coast communities. The comparison is based on a Winter Water usage of 7 Hcf.

As shown, there is a wide range of charges among the surveyed communities. The City's current charges are in the lower range, and the estimated bills throughout the five years under the proposed rates remain on the low end of comparable agency charges. It is interesting to note that even with the increase proposed five years from now, a typical Single Family Resident customer in the City will still pay \$14 to \$32 per month less than the highest and comparable to the amount currently charged by several other sewer agencies.

In addition, it should be noted that this rate survey does not provide the full picture of the utility's position. For example, some of the agencies may have additional increases that are in process or being proposed, may have varying wastewater service program cost, quality, and reliability issues or objectives, and there is often a wide range of variance in local level of service, capital reinvestment, and preventive maintenance considerations. Given the current condition and direction of the City's utility, the City's wastewater rates are well in line with other local communities.

5.5 Alternative Capital Facility Charges

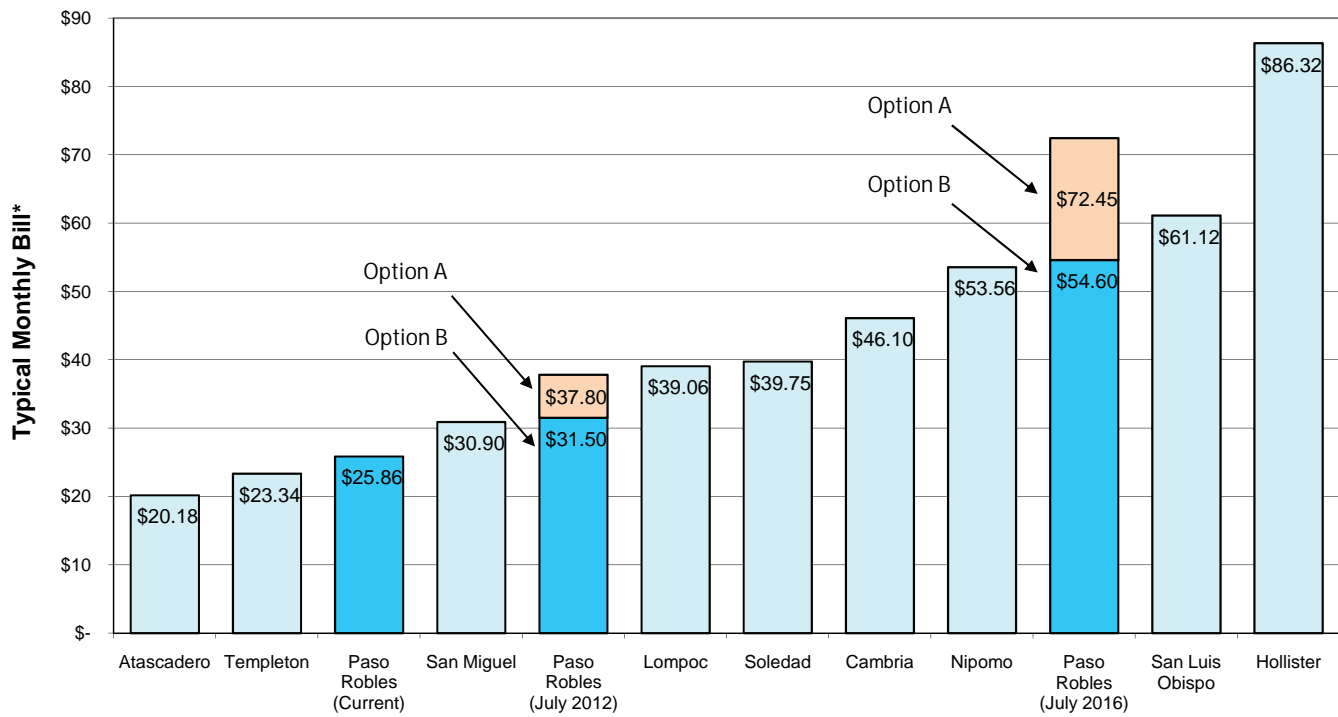
In addition to the use of wastewater rates to fund system costs, the City utilizes a Wastewater Facility Charge (currently named Sewer Connection Fee) to recover the costs of new development's impact on the wastewater system. The purpose of this charge is to assure that future customers pay their fair share of system costs, both to recoup costs invested in the existing system and to finance future facilities needed to support growth.

To assess growth's fair share of costs, Kennedy/Jenks prepared a Wastewater Facility Charge Report under a separate cover. The findings of this study are summarized as follows:

Current Facility Charges (Connection Fees)

<u>Type of Development</u>	<u>Sewer Connection Fee</u>
Single Family Residence	\$5,467
Multi-Family Residence	\$4,961
Mobile Home Park	\$5,467
Mobile Home Subdivision Lot	\$5,467
Commercial/Industrial	\$5,467
Hosp/Convalescent	\$5,467 + \$252 per room
Motel/Hotel	\$5,467 + \$102 per room
School	\$7,723 + \$102 per classroom

FIGURE 2
Single Family Residential
Wastewater Rate Survey - Typical Bills



* Based on 7 HCF per month winter water use, when applicable.

Alternative Facility Charges (Connection Fees)

Alternative charges are derived by correlating the costs to serve future growth with the projected ultimate demands on the wastewater system. Since the cost profile of Option A and B differ, so too is the resulting Facility Charge. Based on the findings of this study, the alternative charges are:

Conventional Financing (user rate Option A) – \$12,900 per EDU for SFR, \$11,600/EDU for MFR. Non-residential is based on water meter size.

SRF Financing (user rate Option B) – \$10,900 per EDU for SFR, \$9,800/EDU for MFR. Non-residential is based on water meter size.

As previously described, 1 EDU is equivalent to the average wastewater discharged from a single family residential (SFR) account. The developed Facility Charges are designed to recover those costs that should be the responsibility of new development. Adoption of a coordinated rate and facility charge plan will assure all customers pay their fair share of the wastewater system costs.

5.6 Summary of Proposed Alternative Rates

The rates outlined herein are intended to fund the essential wastewater treatment plant upgrade and other capital needs to serve existing customers, meet the wastewater fund's debt service requirements, provide the necessary funds for ongoing system management and operation and return the fund to a desired level of financial stability. Without the treatment plant upgrade, the City cannot comply with its waste discharge permit and would adversely affect the Salinas River. The proposed rates also support the City's key goals of anticipating regulatory requirements and increasing/diversifying water resources by upgrading the plant with future water recycling in mind. The proposed rate structure is also consistent with the "pay-for-what-you-use" philosophy.

With current revenues of approximately \$4.7 Million and costs in year five projected to exceed \$11 to \$14 Million, an increase in rates and new customer facility charges are essential. The proposed rates combined with the increase in capital facility charges are designed to meet this revenue shortfall. The proposed rate structure is consistent with the costs of service and supports the "pay-for-what-you-use" philosophy.

In addition to the rate-related adjustments provided herein, the City should plan for the methodical review of system costs, wastewater discharges, and utility rates. Much of this work can be incorporated as an element of the annual budget process as additional information is being developed and evaluated. Over the next couple of years, an important element of this review is the need to confirm the funding mechanism needed to construct the wastewater treatment plant. Regardless of the financial scenario selected, a high priority should be placed on preserving the City's position within the State Revolving Fund Loan Program and assessing its viability, as this is an important cost-saving measure for the City's ratepayers.

* * *

Appendix A

RWQCB Time Schedule Order



Linda S. Adams
Acting Secretary for
Environmental Protection

California Regional Water Quality Control Board Central Coast Region

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401-7906
(805) 549-3147 • FAX (805) 543-0397
<http://www.waterboards.ca.gov/centralcoast>



Edmund G. Brown Jr.
Governor

July 5, 2011

Mr. Matt Thompson
Wastewater Manager
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446
MThompson@prcity.com

Sent via Electronic Mail only

Dear Mr. Thompson:

TIME SCHEDULE ORDER NO. R3-2011-0213 FOR WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2011-0002, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. CA0047953 – THE CITY OF EL PASO DE ROBLES WASTEWATER TREATMENT PLANT, SAN LUIS OBISPO COUNTY, WDID 3 400105001, CIWQS PLACE ID 247750

This letter transmits Time Schedule Order No. R3-2011-0213 (TSO Order) for the City of El Paso de Robles (City) wastewater treatment facility.

On May 5, 2011, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted revised Waste Discharge Requirements Order No. R3-2011-0002 (NPDES Permit) regulating the discharge of secondary-treated effluent from the City's wastewater treatment facility to the Salinas River. The NPDES Permit included a new effluent limitation for monthly average total nitrogen of 10 mg/L. The City cannot currently meet the new effluent limitation without significant upgrades to the existing wastewater treatment facility. Implementation of an upgrade project is currently underway.

The TSO Order establishes an interim effluent limitation and requires the City to comply with a compliance schedule for completion of the wastewater treatment facility upgrades and the final effluent limitation contained within the NPDES Permit.

In accordance with California Water Code section 13167.5, the Central Coast Water Board provided notice and a comment period of 30 days, ending on June 27, 2011, for proposed TSO Order No. R3-2011-0213 on May 26, 2011. No comments were received on the draft TSO Order. The final time schedule order can be viewed and downloaded from the Water Boards website at:

http://www.swrcb.ca.gov/centralcoast/board_decisions/adopted_orders/index.shtml

California Environmental Protection Agency

Scroll down to "Time Schedule Order No. R3-2011-0213 for the City of El Paso de Robles" and select link located in the right column.

If you have questions, please contact **Matthew Keeling at (805) 549-3685** (email mkeeling@waterboards.ca.gov), or Sheila Soderberg at (805) 549-3592.

Sincerely,



Roger W. Briggs
Executive Officer

Enclosures: Time Schedule Order No. R3-2011-0213

S:\NPDES\NPDES Facilities\San Luis Obispo Co\Paso Robles WWTP\2011 Renewal\R3-2011-0002\TSO R3-2011-0213\R3-2011-0213_TSO_Transmittal.doc

cc:

Paper copy (w/o enclosure):

Mr. Ali Salmanzedeh
1245 Park St.
Paso Robles CA 93446

Electronic copies via email (with enclosure):

Mr. Jeff Hodge, Templeton CSD, Jhodge@templetoncsd.org
Mr. Steve Tanaka, San Miguel CSD, c/o Wallace Group, StevenT@wallacegroup.us
Mr. Richard Wilhoit, Estrella Associates, Dick@estrellaassociates.com
Mr. Paul Sorensen, Fugro, psorensen@fugro.com
Mr. Gordon Hensley, EPI/SLO Coastkeeper, g.r.hensley@sbcglobal.net
Mr. Dan Connally, PG Environmental, LLC, Dan.Connally@pgenv.com
Mr. David Smith, USEPA, Smith.davidw@epa.gov
Mr. Jamie Maricola, USEPA, Maricola.JamesPaul@epa.gov
Mr. Jae Kim, Tetra Tech, jae.kim@tetrattech-ffx.com
Mr. John Ramirez, Monterey County Environmental Health, ramirezj1@co.monterey.ca.us
Mr. Kurt Souza, California Department of Public Health, Kurt.Souza@cdph.ca.gov
Ms. Elizabeth Krafft, Monterey County Water Resources Agency, krafftea@co.monterey.ca.us
Mr. Curtis Batson, San Luis Obispo County Health Department, cbatson@co.slo.ca.us
Mr. Mike Hill, California Department of Fish and Game, mhill@dfg.ca.gov

Mr. Brandon Sanderson, California Department of Fish and Game, bsanderson@dfg.ca.gov

Mr. John Biegel, Water Board, jbiegel@waterboards.ca.gov

Mr. Matthew Keeling, Water Board, mkeeling@waterboards.ca.gov

Ms. Frances McChesney, State Water Board, fmcchesney@waterboards.ca.gov

Mr. Todd Stanley, Water Board, tstanley@waterboards.ca.gov

State Water Board, NPDES_wastewater@waterboards.ca.gov

Mr. Manuel Saavedra, Monterey Co. Water Resources Agency, saavedram@co.monterey.ca.us

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401**

TIME SCHEDULE ORDER NO. R3-2011-0213

**REQUIRING THE
CITY OF EL PASO DE ROBLES
TO COMPLY WITH REQUIREMENTS
PRESCRIBED IN ORDER NO. R3-2011-0002**

The California Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board), finds:

1. The City of El Paso de Robles (hereafter City or Discharger) owns and operates wastewater collection, treatment, and disposal facilities to provide sewerage service to the City, the community of Templeton, and the California Department of Corrections and Rehabilitation.
2. The Central Coast Water Board adopted revised waste discharge requirements regulating the discharge of secondary-treated effluent from the Discharger's wastewater treatment facility to the Salinas River. These requirements were issued in Waste Discharge Requirements Order No. R3-2011-0002 (Order No. R3-2011-0002), adopted by the Central Coast Water Board on May 5, 2011. Order No. R3-2011-0002 serves as a National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0047953).
3. Order No. R3-2011-0002 includes a new effluent limitation for monthly average total nitrogen of 10 mg/L as nitrogen (N). The Discharger cannot currently meet the new effluent limitation without significant upgrades to the existing wastewater treatment facility.
4. The Discharger is in the midst of implementing a complete wastewater treatment plant upgrade. Planning, design, California Environmental Quality Act compliance and permitting for the project are complete. The 100% design drawings and specifications for the project include a biological nutrient removal system that will reportedly enable the Discharger to meet the new nitrogen effluent limitation. The remaining phases of the project include securing additional funding, bidding, and construction.
5. The Discharger submitted a technical memorandum to the Central Coast Water Board on May 11, 2011, containing a treatment system upgrade project milestone schedule, recent effluent data, and a proposed interim total nitrogen effluent limitation in support of a time schedule order (or compliance schedule). The project milestone schedule is as follows:

Table 1 – Wastewater Treatment System Upgrade Schedule

Project Milestone	Completion Date
1. Adopt City ordinance to increase wastewater facility charges (connection fees).	November 1, 2011
2. Introduce wastewater rate increases to public and begin Proposition 218 process.	January 1, 2012
3. Adopt City ordinance to increase wastewater rates.	June 1, 2012
4. Advertise wastewater treatment plant upgrade for construction bids.	November 1, 2012
5. Award contract and issue notice to proceed (NTP) with construction.	February 1, 2013
6. Substantial completion of construction (28 months after NTP).	June 1, 2015
7. Stabilization and optimization of biological nutrient removal process. Full compliance with effluent limits.	September 1, 2015

The Discharger's most recent effluent monitoring results for total nitrogen are as follows:

Table 2 – Total Nitrogen Effluent Data

Date	Total Nitrogen (mg/L as N)
October 2009	33
January 2010	64
April 2010	26
July 2010	27
October 2010	20
January 2011	44

The 95th percentile of these data is 59 mg/L. Based on these data the Discharger recommended an interim total nitrogen effluent limit of no less than 59 mg/L.

NEED FOR ORDER AND LEGAL BASIS:

6. California Water Code section 13300 authorizes the Central Coast Water Board to establish a time schedule of specific actions the Discharger shall take in order to correct or prevent a violation of requirements.
7. State Water Resources Control Board (State Water Board) Resolution No. 2008-0025, *Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits*, establishes uniform provisions authorizing compliance schedules for NPDES permits.
8. The Central Coast Water Board has delegated to its Executive Officer all powers and duties authorized by California Water Code section 13223. This power included the

authority to issue a time schedule order pursuant to California Water Code section 13300.

9. The Discharger cannot achieve immediate compliance with the total nitrogen effluent limitation in Order No. R3-2011-0002, which is new to the waste discharge requirements. As a result, a discharge of waste from the existing wastewater treatment facility is taking place which threatens to violate requirements prescribed by the Central Coast Water Board. Therefore, this Order requires the Discharger to undertake actions to comply with the final effluent limitation.
10. Violations of the final effluent limitation for total nitrogen are not subject to California Water Code section 13385, subdivisions (h) and (l), as long as the Discharger complies with all of the requirements of this time schedule order.
11. This time schedule order requires the Discharger to comply with a compliance schedule, which will allow the Discharger to achieve full compliance with the total nitrogen effluent limitation in Order No. R3-2011-0002.
12. This enforcement action is taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) in accordance with section 15321, Chapter 3, Title 14, California Code of Regulations.
13. In accordance with California Water Code section 13167.5, this time schedule order was made available for a 30-day public comment period. A draft of this time schedule order was mailed to interested parties and posted on the Central Coast Water Board website on May 26, 2011. No comments were received.
14. Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, Title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at the following address or will be provided upon request:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

IT IS HEREBY ORDERED, that, pursuant to California Water Code section 13300, the City of El Paso de Robles, at its wastewater treatment facility, shall:

1. Comply with an interim monthly average total nitrogen effluent limitation of 59 mg/L as nitrogen commencing on the effective date of Time Schedule Order No. R3-2011-0213.
2. Comply with the following compliance schedule:

Table 3 –Compliance Schedule

Project Milestone	Completion Date
1. Adopt City ordinance to increase wastewater facility charges (connection fees).	November 1, 2011
2. Introduce wastewater rate increases to public and begin Proposition 218 process.	January 1, 2012
3. Adopt City ordinance to increase wastewater rates.	June 1, 2012
4. Advertise wastewater treatment plant upgrade for construction bids.	November 1, 2012
5. Award contract and issue notice to proceed (NTP) with construction.	February 1, 2013
a. Submit construction progress report	February 1, 2014
b. Submit construction progress report	February 1, 2015
6. Substantial completion of construction (28 months after NTP).	June 1, 2015
7. Stabilization and optimization of biological nutrient removal process. Full compliance with effluent limits.	September 1, 2015

Note: Construction progress reports (milestones 5.a and b) included to comply with State Water Board Resolution No. 2008-0025 requirements that there shall be no more than one year between interim compliance schedule dates. The two reports shall demonstrate reasonable progress towards completing construction activities based on a construction schedule provided by the Discharger as part of the progress reports pursuant to project milestones 5.a and b.

3. Achieve full compliance with the average monthly total nitrogen effluent limitation of 10 mg/L as N pursuant to Order No. R3-2011-0002 by September 1, 2015.
4. The Discharger shall notify the Central Coast Water Board, in writing, no later than 14 days following each interim date (completion date), of its compliance or noncompliance with the interim requirements (project milestone) as specified within Table 3 of this time schedule order.
5. If the Discharger fails to comply with any provisions of this time schedule order, the Discharger will be subject to mandatory minimum penalties pursuant to California Water Code section 13385 for violations of the interim effluent limitation and may be subject to administrative civil liability pursuant to California Water Code section 13350 for failure to meet project milestones by the completion dates specified within Table 3. Potential administrative civil liability will be based on the number of days the Discharger is late in complying with the compliance schedule and will be inclusive of all missed or late project milestones. The Central Coast Water Board may also refer the

case to the Attorney General for injunctive and civil monetary remedies, pursuant to California Water Code section 13331 and section 13385.

6. The Discharger shall comply with all provisions of Order No. R3-2011-0002 that are not in conflict with this Order.

The Executive Officer may modify the time schedule in this Order to permit a specified task or tasks to be completed at later dates if the Discharger demonstrates and the Executive Officer determines that the delay was beyond the reasonable control of the Discharger to avoid. In addition, the Executive Officer may choose to rescind this time schedule order if the Discharger fails to comply with any provision contained herein.



ORDERED BY _____
Roger W. Briggs, Executive Officer

Date: 7-5-2011

Appendix B

Miscellaneous Supporting Information

**APPENDIX B - PROJECTED REVENUE PLAN
ALTERNATIVE DEPRECIATION FUNDING PROGRAM**

Description	Projected										Projected					
	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
Depreciation Funding - Option A																
Pipelines/PS Only	\$2,354,100	\$2,371,600	\$2,388,700	\$2,398,500	\$2,408,500	\$2,422,500	\$2,441,000	\$2,456,100	\$2,526,700	\$2,543,000	\$2,566,700	\$2,663,500	\$2,689,100	\$2,708,200	\$2,728,100	\$2,748,800
WWTP Portion	\$178,000	\$224,800	\$224,800	\$452,200	\$821,800	\$1,191,400	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000
Total Depreciation	\$2,532,100	\$2,596,400	\$2,613,500	\$2,850,700	\$3,230,300	\$3,613,900	\$3,803,000	\$3,818,100	\$3,888,700	\$3,905,000	\$3,928,700	\$4,025,500	\$4,051,100	\$4,070,200	\$4,090,100	\$4,110,800
Portion To Be Funded	\$0	\$0	\$2,613,500	\$2,850,700	\$3,230,300	\$3,613,900	\$3,803,000	\$3,818,100	\$3,888,700	\$3,905,000	\$3,928,700	\$4,025,500	\$4,051,100	\$4,070,200	\$4,090,100	\$4,110,800
Depreciation Funding - Option B																
Pipelines Only (Book Value)	\$1,187,500	\$1,205,000	\$1,222,100	\$1,231,900	\$1,241,900	\$1,255,900	\$1,274,400	\$1,289,500	\$1,360,100	\$1,376,400	\$1,400,100	\$1,496,900	\$1,522,500	\$1,541,600	\$1,561,500	\$1,582,200
WWTP Portion	\$178,000	\$224,800	\$224,800	\$452,200	\$821,800	\$1,191,400	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000	\$1,362,000
Total Depreciation	\$1,365,500	\$1,429,800	\$1,446,900	\$1,684,100	\$2,063,700	\$2,447,300	\$2,636,400	\$2,651,500	\$2,722,100	\$2,738,400	\$2,762,100	\$2,858,900	\$2,884,500	\$2,903,600	\$2,923,500	\$2,944,200
Portion To Be Funded	\$0	\$0	\$0	\$1,231,900	\$1,241,900	\$1,255,900	\$1,274,400	\$1,289,500	\$2,722,100	\$2,738,400	\$2,762,100	\$2,858,900	\$2,884,500	\$2,903,600	\$2,923,500	\$2,944,200

Source: City Finance records and GIS. Option A developed by Kennedy/Jenks' Wastewater Facility Charge Study, August 2011. Projected depreciation based on new capital expenditures and average useful life values per asset type.

APPENDIX B
2002 SEWER BONDS
Semi-Annually 6/1 & 11/1

Fiscal Year	Principal	Interest	Totals
FY 11	205,000	322,319	\$527,319
FY 12	210,000	315,554	\$525,554
FY 13	215,000	308,204	\$523,204
FY 14	225,000	300,410	\$525,410
FY 15	235,000	291,973	\$526,973
FY 16	240,000	282,573	\$522,573
FY 17	250,000	272,973	\$522,973
FY 18	260,000	262,723	\$522,723
FY 19	275,000	251,803	\$526,803
FY 20	285,000	239,978	\$524,978
FY 21	295,000	227,438	\$522,438
FY 22	310,000	214,163	\$524,163
FY 23	330,000	200,213	\$530,213
FY 24	345,000	184,538	\$529,538
FY 25	365,000	168,150	\$533,150
FY 26	380,000	150,813	\$530,813
FY 27	395,000	132,763	\$527,763
FY 28	415,000	114,000	\$529,000
FY 29	435,000	93,250	\$528,250
FY 30	455,000	71,500	\$526,500
FY 31	475,000	48,750	\$523,750
FY 32	500,000	25,000	\$525,000
Totals	7,100,000	4,479,081	\$11,579,081

Source: City of Paso Robles, Finance; September 2009

APPENDIX B - WASTEWATER CAPITAL IMPROVEMENT PROGRAM BUDGET

Project ¹	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	FY 2023-24	FY 2024-25	FY 2025-26	TOTAL PROJECT COST ²
Wastewater Collection System Projects:																		
1 Phase I, sewer service expansion to West Airport Area (West Dry Creek Rd and Airport Rd)									\$4,050,964									\$4,051,000
Phase II, sewer service expansion to South Airport Area (East Dry Creek Road)											\$503,283	\$1,570,243	\$544,351					\$2,617,900
2 Lift station rehabilitation to upgrade obsolete pumps, rails, and motors and to provide longer response time	\$110,701	\$115,129	\$119,734	\$124,524	\$129,504	\$134,685	\$140,072	\$145,675	\$151,502	\$157,562	\$163,864	\$170,419	\$177,236	\$184,325	\$191,698	\$199,366	\$207,341	\$2,623,300
3 LS1 and T11 Lift Station #1 Capacity Expansion							\$0	\$0				\$2,714,363						\$2,714,400
4 LS 12 Lift Station #12 Capacity Expansion												\$1,648,755						\$1,648,800
5 Rehab various sewerlines	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$790,824	\$822,457	\$855,356	\$889,570	\$925,153	\$962,159	\$1,000,645	\$1,040,671	\$1,082,298	\$1,125,590	\$1,170,613	\$1,217,438	\$14,382,800
6 Rehab/replace old manholes	\$100,000	\$104,000	\$108,160	\$112,486	\$116,986	\$121,665	\$126,532	\$131,593	\$136,857	\$142,331	\$148,024	\$153,945	\$160,103	\$166,507	\$173,168	\$180,084	\$187,298	\$2,369,800
8 W1 Riverside Interceptor			\$389,376															\$389,400
9 W3 - 36th Street Sewer Service Area							\$295,033											\$295,000
12 W7 - 12th St between Vine and Olive Sewer Upgrade									\$66,861									\$66,900
13 Re-coating of north/south pipe bridges			\$162,240															\$162,200
15 Buena Vista - Cuesta College Carryover Projects (LS#12 & West Side Sewer), as of 6-30-2010		\$30,000																\$30,000
		\$559,766																\$559,800
Collection System Subtotal =	\$710,700	\$1,308,900	\$1,279,500	\$737,000	\$746,500	\$1,047,200	\$1,384,100	\$1,132,600	\$5,295,800	\$1,225,000	\$1,777,300	\$7,258,400	\$1,922,400	\$1,433,100	\$1,490,500	\$1,550,100	\$1,612,100	\$31,911,300
Wastewater Treatment Plant Improvement Project:																		
17 WWTP upgrade to 4.9 MGD Advanced Secondary Treatment Process ³	\$2,200,000	\$1,871,755	\$0	\$9,097,049	\$14,782,705	\$14,782,705	\$6,822,787	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,557,000
Wastewater Treatment Plant Subtotal =	\$2,200,000	\$1,871,800	\$0	\$9,097,000	\$14,782,700	\$14,782,700	\$6,822,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,557,000
Grand Total Planned Capital Expenditure	\$2,910,700	\$3,180,700	\$1,279,500	\$9,834,000	\$15,529,200	\$15,829,900	\$8,206,900	\$1,132,600	\$5,295,800	\$1,225,000	\$1,777,300	\$7,258,400	\$1,922,400	\$1,433,100	\$1,490,500	\$1,550,100	\$1,612,100	\$81,468,300

¹ Primary source for projects listed is the Collection System Master Plan by Boyle Engineering Corp dated January 2007.
² Total Project Costs have both been adjusted to current dollars using ENR 20 Cities Construction Cost Indexes and adjusted for inflation at 4%/year.
³ Capital projects for FY 09/10 listed from proposed City budget as of June 11, 2009.

Attachment 4
Wastewater Facility Charge Draft Report
Dated August 2011

Kennedy/Jenks Consultants

2355 Main Street, Suite 140
Irvine, California 92614
949-261-1577
FAX: 949-261-2134

City of Paso Robles
Wastewater Facility
Charge
Draft Report

19 August 2011

Prepared for
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446

K/J Project No. 0983010*10

Kennedy/Jenks Consultants

Engineers & Scientists

2355 Main Street, Suite 140

Irvine, California 92614

949-261-1577

949-261-2134 (Fax)

19 August 2011

Mr. Doug Monn
Director of Public Works
City of Paso Robles
1000 Spring Street.
Paso Robles, California 93446

Subject: Draft Report - Wastewater Facility Charge Study
K/J 0983010*10

Dear Mr. Monn:

Kennedy/Jenks Consultants is pleased to submit the Draft Wastewater Facility Charge Study to the City of Paso Robles (City). By way of process, we have submitted this report as a digital ".pdf" file for your distribution within the City as appropriate.

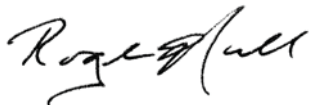
This Facility Charge Study is a compilation of the analysis and findings of the City's wastewater system and the development and documentation of growth's fair share of system costs.. The results of this evaluation are intended to provide the City with the nexus of cost and benefit in accordance with current requirements.

One important element of system cost is associated with funding the City's \$49 Million wastewater treatment plant upgrade. It is expected that the State Revolving Fund (SRF) Loan Program will be used to fund this project as it provides very favorable financing terms. However, since these funds are uncertain, the City may decide to assume a more conservative financial position and adopt new facility charges based on the costs of conventional financing for this important facility. Summary tabular data associated with this financing mechanism is provided in the Table Section of this report.

Please contact us if you have any questions or need additional information.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Roger Null, V.P.
Project Manager

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Section 1: Background

1.1 Background

The City of Paso Robles (City) levies a Wastewater Facility Charge (currently named Sewer Connection Fee) to recover the costs of new development's impact on the wastewater system. The purpose of this charge is to assure that future customers pay their fair share of system costs, both to recoup costs invested in the existing system and to finance future facilities needed to support growth. As such, a Facility Charge equitably distributes facility costs to future users based on their demands on the wastewater system. The assets that are used to collect, pump, and treat the City's wastewater are the basis for the costs of capacity in the wastewater system.

In recognition of the need to remain current and integrate the findings of the City's *Sewer Collection System Master Plan* dated January 2007 and proposed wastewater treatment plant upgrade, the City desires to update its Wastewater Facility Charges. This report is intended to update the current cost of wastewater system capacity, reflect these costs in the development of optional updated facility charges, and document these charges in conformance with the requirements of California Government Code Section 66000 et seq. Connection fees now in effect are based on the "Final Letter Report – Updated Water and Sewer Connection Fees" dated "May 24, 2004" prepared by "Foresight Consulting Services".

1.2 Regulatory Requirements

The regulations that govern "capacity charges" such as the Wastewater Facility Charge discussed herein generally fall into two areas: compliance with State government codes and adherence to City ordinances.

1.2.1 State Government Codes

California Government Code Sections 66013, 66016, 66022 and 66023 are the primary government code sections applicable to the development and recovery of "capacity charges". The focus of these sections is summarized below:

- The City must establish that the "capacity charge," in this case, the Capital Facility Charge does not exceed the estimated reasonable cost of capacity in facilities in existence or to be constructed for the benefit of the customer charged.
- The Capital Facility Charge revenues must be segregated from operating and maintenance funds and deposited in a separate fund.
- The City may only expend the revenues for the purpose for which the charges were collected.

In summary, these sections of Government Code suggest that the basis for facility charges be consistent with new development's impact on the cost of capacity in the City's wastewater system. It should be noted however, that the documentation and supporting nexus for deriving

the level of fair and equitable charges is not limited to a single criteria, acknowledging the fact that individual agencies may have unique circumstances that would result in charges that are fair and reasonable. Since the courts have approved assorted charge structures and methods over the years, there is a wide variation in the approach and method behind the development of these charges throughout California.

1.2.2 City Administrative Code

The legal authority applicable to current facility charges (connection fees) is contained in Ordinance 04-163, 04-231, and 05-025. The current charges are based upon a comparison of existing and build-out acreage with an “Equivalent Dwelling Unit (EDU)” factor applied to calculate incremental EDU’s and a corresponding dollar value per EDU.

1.3 Current Connection Fees

In accordance with existing City ordinances, sewer connection fees effective July 1, 2009, are:

<u>Type of Development</u>	<u>Sewer Connection Fee</u>
Single Family Residence	\$5,467
Multi-Family Residence	\$4,961
Mobile Home Park	\$5,467
Mobile Home Subdivision Lot	\$5,467
Commercial/Industrial	\$5,467
Hosp/Convalescent	\$5,467 + \$252 per room
Motel/Hotel	\$5,467 + \$102 per room
School	\$7,723 + \$102 per classroom

Section 2: Calculation Method

To calculate facility charges requires the selection of an appropriate calculation method and valuation approach. These are discussed below.

2.1 General Approach

There are two primary methods commonly used to develop facility charges:

- Incremental approach or,
- System capacity buy-in approach

While there are hybrids to these basic methods, these two methods represent the principal approaches and are discussed herein. The recommended approach is also provided at the conclusion of this section.

2.1.1 Incremental Approach

The incremental approach is based on quantifying the future costs of additional capacity and unitizing these costs by the incremental quantity of additional demand served by this capacity. The capital improvement program, derived from the City's *Sewer Collection System Master Plan* dated January 2007, provides the basis for costs and wastewater demand projections utilized in this approach.

2.1.2 Capacity Buy-In Approach

Similar to the incremental approach, the capacity buy-in approach is based on the cost of future wastewater system capacity, and unitizing these costs by the demand served by this capacity. However, the capacity buy-in approach includes the value of the existing system assets in the basis of costs. In doing so, the quantity of demand served by the value of the existing system plus the future costs of proposed capital improvements is represented by the total projected ultimate demand in the City's wastewater system.

2.1.3 Recommended Approach

The capacity buy-in approach was selected as the basis for developing the City's proposed updated Wastewater Facility Charges because it:

- Coincides with the City's adopted Water Capacity Charge
- Is easily understood
- Provides a nexus between the cost of capacity and the proposed updated Wastewater Facility Charges, and
- Complies with current Government Code.

This approach was discussed with City staff and confirmed to be the appropriate method.

To utilize this approach, the value of the existing system must be derived, the costs of future system improvements included, and current and future flows estimated. These elements are addressed in the following sections.

2.2 Valuation Method

As previously discussed, there is substantial variation throughout California regarding the calculation of utility system value. It is common for an agency to develop a replacement cost for each asset based on current construction costs, as opposed to using the original value of booked assets from financial records. Thus, a Replacement Cost New (RCN) value of each asset is used as a primary element of the basis for deriving valuation.

In some cases, RCN values have been adjusted to account for how an asset was acquired by deducting the estimated value of contributed assets. Other agencies have accounted for asset wear-and-tear by deducting the level of accumulated depreciation. These and other methods produce “reasonable”, and often similar, valuation results.

The City, like most other agencies in California, has established that a full RCN valuation does not produce reasonable results. Since the City’s Geographic Information System (GIS) is the recognized record of wastewater utility asset information, this system is deemed to be the most accurate record of the age and extent of wastewater assets. It was used in the discounting method, providing a basis for the depreciation calculation to represent asset wear-and-tear. Accordingly, a Replacement Cost New Less Depreciation (RCNLD) method is utilized herein and is derived by incorporating the asset specific age and projected useful life with the replacement cost values. Cash and cash equivalents, which is also an enterprise asset, are also often included in the valuation. These assets have been omitted in this baseline utility valuation assessment.

An example of how the RCNLD method is calculated is: say an asset was installed 10 years ago for a cost of \$100,000. The replacement cost new (that is the cost to install that same asset today would be greater, as inflation) has increased its cost. Today, for example, the cost to install that same asset may be \$130,000. If however, the life expectancy of this type of an asset were say 50 years, then this asset has already reached 20% of its useful life (10 years/50years), or 80% of its life is remaining. In this example, the RCNLD value is \$104,000 ($\$130,000 \times 80\%$).

Section 3: Wastewater System Capacity Costs

A review of capital facilities was performed to develop and/or identify the costs of facilities used by future wastewater customers. Under the capacity buy-in approach, the cost of future capacity in the City's wastewater system is based on two primary components:

- the value of existing facilities, and
- the costs associated with needed improvements to expand or improve the system to meet build out conditions.

Each of these two cost elements is subdivided herein into three asset types:

1. collection system pipelines
2. sewage lift stations, and
3. wastewater treatment plant facilities.

These elements are discussed in the following subsections.

3.1 Existing System Valuation

As discussed, the City's existing wastewater system is designed to collect and convey wastewater to the City-owned wastewater treatment plant on the north end of the City limits. Collection and conveyance is performed with a network of over 136 miles of gravity pipelines and supported by fourteen sewer lift stations. These facilities lift sewage to a higher elevation in the primary collection system trunk lines for conveyance to the wastewater treatment plant.

Information related to the size, age, material, and other specific information for each pipeline segment and lift station is maintained by the City through a GIS. This information as of August 2009 was the primary basis for the wastewater system asset inventory utilized in this study.

A summary of wastewater collection system pipeline inventory is provided in **Table 1**. As shown, over 57% of the City's collection system is 8-inches in diameter, with 90% represented by 12-inch diameter or smaller pipelines. Similarly, two-thirds of these pipelines are made of polyvinyl chloride (PVC), a widely used plastic piping material, and almost one-third is made with vitrified clay pipe (VCP), which has been in use for wastewater collection in the United States for over 150 years.

Valuation of each pipeline segment is based on its length, diameter, material, and age. This information, correlated to widely acceptable useful life criteria per material type and current construction unit costs, provides the basis for the RCNLD of each asset. A summary the City's wastewater pipeline system RCNLD value is shown in **Table 2**. As shown, the RCN value of the buried wastewater pipelines in the City is almost \$190 Million; the RCNLD value that incorporates depreciation is approximately \$133 Million. Supporting unit costs and useful life values are included in **Appendix A**, along with an asset register of approximately 2,900 wastewater pipeline segments that were used in support of this calculation.

The existing value of the City's wastewater lift stations and existing wastewater treatment plant is derived in a similar manner. The primary difference in valuation is based on differing cost parameters and the fact that some of these assets were constructed with borrowed funds. Since the City still has approximately \$7 Million remaining on that loan, this and other asset costs are combined to derive the value of these assets. The resulting value of these facilities is shown in **Tables 3, 4, and 5**. The sum of these asset values is approximately \$13.8 Million.

3.2 Future System Improvement Costs

Future wastewater capital improvements have been developed through several important studies, the City's *Sewer Collection System Master Plan* dated January 2007 and the *Wastewater Treatment Plant Upgrade Facility Plan* dated July 2009. These planning and subsequent design efforts have formalized the wastewater system's projected needs for collection, pumping and treatment to support build-out. The Master Plan's comprehensive capital improvement program (CIP) is shown in **Table 6**. As shown, the collection and pumping element of the CIP is estimated to cost approximately \$32 Million.

To meet regulatory requirements and long-term growth needs, the City must upgrade its wastewater treatment plant. The current engineer's cost estimate for this facility is

approximately \$49.6 Million in January 2014 dollars. Two options to fund the construction of the plant are under consideration.

- The preferred financing approach is a State Revolving Fund (SRF) loan. This very low interest loan is designed to help communities with just such a need. As shown in **Table 7**, the total cost of the new wastewater plant including interest is approximately \$66,600,000. As indicated, since Templeton Communities Services District (TCSD) has a 9% entitled capacity share, their share of the upgraded plant has been deducted from the City's system value. A summary of value of the City's wastewater utility for SRF financing is shown in **Table 8**.
- On the other hand, there is no guarantee that a low-interest State loan will be available. To provide a financial safety net, a financial scenario was developed that presumes SRF funding will not be available. Under this condition, conventional borrowing will be required to upgrade the wastewater treatment plant at higher interest rates, increased annual debt service payments, and an accelerated need for increased revenues to meet those costs. Tabulation of Facility Charges based on conventional financing is listed in a later section of this report.

Further, note that identified future system components are primarily trunk lines and other facilities that serve the broader community. Individual developments may still be required to construct system components that primarily serve that development. Such conditions of approval are developer-financed and are in addition to the community-wide contributions reflected in utility connection fees.

Last, the City's "Water Resources Plan Integration and Capital Improvement Program" dated February 2007 and the "2010 Urban Water Management Plan" identify recycled water as future components of the City's water resource portfolio. Costs of additional wastewater treatment and recycled water distribution are omitted from this calculation of wastewater facility charges. The financial structure for recycled water will be put into place as plans advance for bringing this water resource on-line.

Section 4: Projected Wastewater Discharge

As previously discussed, the selected capacity buy-in approach typically uses ultimate discharge for the calculation of the unit cost of capacity. For example, a system component with an estimated asset value of \$5 Million could provide capacity to serve 15,000 equivalent dwelling units. So, the unit cost is \$333 per equivalent dwelling unit. If 10,000 dwellings exist, then each of the 5,000 additional units would pay \$333 each as part of this asset buy-in.

Accordingly, the quantity of new wastewater demands is an important consideration in the development of the City's updated Capital Facility Charges.

The current wastewater discharges are based on metered readings of wastewater discharged to the City's wastewater treatment plant. The existing discharges and build-out discharges as stated in the "*City of Paso Robles Wastewater Treatment Plant Facility Plan*" dated July 2009 are referenced herein. Flow estimates have been unitized per single family residential dwelling unit (**Table 9**).

The wastewater flow per equivalent dwelling unit (EDU) is calculated based on several key values derived in the City's 2009 Facility Plan. The first component is the flow per person. This value is based on the City's existing flow of 2.81 MGD (2,810,000 gallons per day), 80% of which is residential contribution, and an existing population of 30,072 people¹. The second component is the average number of persons residing in a single family dwelling unit. The City Community Development Department estimates a population per household of 2.7 persons². Based on these values, the demand associated with one dwelling unit (DU) is calculated as follows:

$$2.81 \text{ MGD}/30,072 \text{ people} \times 80\% = 74 \text{ gallons/person} \times 2.7 \text{ pph} = \mathbf{200 \text{ gallons/DU} = 1 \text{ EDU}}$$

At this equivalent flow rate, an estimated 14,040 EDUs comprise the City's current customer base, projected to increase to 21,985 EDUs at build-out (**Table 9**).

Section 5: Proposed Wastewater Facility Charges

The updated Wastewater Facility Charge is calculated by correlating the costs to serve future growth with the projected ultimate demands on the wastewater system. As such, the wastewater system value (**Table 8**) is divided by the projected ultimate discharge (**Table 9**) to derive a base unit cost of capacity. The result of this unit calculation for SRF financing is shown in **Table 10**. As shown, the unit cost of new capacity for the City's wastewater system is \$54,500 per 1,000 gallons/day, or \$10,900 per EDU.

Consistent with the City's current Sewer Connection Fee, a multifamily residential (MFR) unit's wastewater discharge is approximately 90% of a typical SFR unit. A 0.9 EDU has a resulting charge of \$9,800 per dwelling unit.

As previously described, 1 EDU is equivalent to the average wastewater discharged from a single family residential (SFR) account. Proposed charges for other customer classes are derived in a similar manner and are based on average wastewater discharge characteristics for each class. The results of this assessment for SRF financing are also provided in **Table 10**.

The existing fee structure adopted by Council in 2004 for non-residential customers is a "base plus incremental fee approach". The proposed non-residential charges in **Table 10** are based primarily on water meter size. The proposed Wastewater Facility Charges increase with the size of the water meter to recover the additional costs that larger water users/dischargers have on system capacity. The capacity ratio factors used herein are based the ratios provided in *AWWA Manual M6: Water Meters – Selection, Installation, Testing and Maintenance*.

The water meter capacity ratio method provides an equitable means of estimating wastewater discharge, is simple for the City to administer, and is consistent with many other California communities. A comparison of wastewater capacity charges for other similar communities is provided in **Appendix A**.

¹ U.S. Census Bureau and State Dept of Finance, 2010 data

² City of Paso Robles demographic statistics dated April 2011.

Note that the nexus between water meter size and probable impact on the City's wastewater system is clear for most non-residential sewer customers. Relatively large dischargers (say, larger than 3-inch water meter) may need further evaluation³. For this reason, new or upgraded discharges that are projected to discharge in excess of 10,000 gallons of wastewater per day⁴ are to prepare an estimate of wastewater discharge, in a manner comparable to that of a Significant Industrial User in accordance with the City's existing Municipal Code, Chapter 14.08 (Sewer System Operations). The City's Department of Public Works shall administer and make recommendations on the assessment of charges in accordance with this report and existing codes and development impact.

Consistent with other utility rates and charges, the proposed charges are phased in over the next several years. Proceeding in this methodical way will enable proposed new development to better plan for future project costs of wastewater system capacity. Low interest SRF financing would support phasing in Facility Charges as is shown in **Table 11**.

As for the cost of the upgraded treatment plant with conventional financing, **Tables 12 and 13** list the estimated costs under that financing option along with proposed Facility Charges. Note that using conventional financing would require that the proposed Facility Charges go into effect in a single year. City Council will consider proposed wastewater user rates along with increased Facility Charges in the coming months, choosing to base rates and fees on conventional financing (user rate Option A), or low interest SRF financing user (rate Option B).

It is recommended that the City adopt increased Wastewater Facility Charges so that growth costs are adequately recovered from future wastewater system customers. As system values and discharge characteristics change, these charges must be updated from time to time to reflect then current conditions and projected values.

* * *

³ There are currently fewer than 40 non-residential sewer customers served by 3-inch or larger water meters.

⁴ There are currently fewer than 30 non-residential sewer customers that consume more than 10,000 gallons per day of water on an average annual basis.

Tables

Table 1
Collection System Asset Inventory - Pipeline Diameter and Material Summary

Pipeline	Linear Feet of Collection System Pipelines														Total	% of Total
	4"	6"	8"	10"	12"	14"	15"	18"	20"	21"	24"	27"	30"	36"		
PVC	6,121	59,515	317,523	35,832	20,270	195	2,442	9,063	0	5,762	0	11,717	6,410	1,521	476,370	66%
VCP	2,492	83,242	93,345	10,300	21,024	0	0	4,128	0	0	4,427	701	2,671	0	222,329	31%
Other	0	3,100	854	5,993	1,704	0	0	9,018	2,401	0	0	0	0	0	23,070	3%
% of Total	1.2%	20.2%	57.0%	7.2%	6.0%	0.0%	0.3%	3.1%	0.3%	0.8%	0.6%	1.7%	1.3%	0.2%	100.0%	-
Total	8,613	145,856	411,722	52,125	42,998	195	2,442	22,208	2,401	5,762	4,427	12,418	9,081	1,521	721,769	100%

Source: City of Paso Robles GIS data, 8/2009.

Table 2
Collection System Asset Inventory - Age and Valuation Summary

Description	Feet of Pipe	Miles of Pipe	Percentage of All Pipeline Assets	Replacement Cost New (RCN)	Annual Depreciation	Accumulated Depreciation	Replacement Cost New Less Depreciation (a)
12" or Smaller							
Constructed Prior to 1950	28,161	5.3	3.9%	\$6,518,600	\$65,200	\$5,636,100	\$882,500
1951 - 1980	214,805	40.7	29.8%	\$51,209,000	\$576,600	\$24,228,300	\$26,980,700
1981 - Present	418,348	79.2	58.0%	\$101,813,300	\$1,333,900	\$20,367,800	\$81,445,400
12" or Smaller Subtotal	661,314	125	91.6%	\$159,540,900	\$1,975,700	\$50,232,200	\$109,308,600
Greater than 12"							
Constructed Prior to 1950	188	0.0	0.0%	\$77,200	\$800	\$52,500	\$24,700
1951 - 1980	11,573	2.2	1.6%	\$5,313,600	\$59,200	\$2,608,500	\$2,705,000
1981 - Present	48,694	9.2	6.7%	\$24,686,200	\$308,900	\$3,634,900	\$21,051,400
Greater than 12" Subtotal	60,455	11	8.4%	\$30,077,000	\$368,900	\$6,295,900	\$23,781,100
Total	721,769	137	100%	\$189,617,900	\$2,344,600	\$56,528,100	\$133,089,700

Source: City of Paso Robles GIS data, 8/2009.

(a) Replacement Cost New Less Depreciation (RCNLD) represents current collection system value.

Note: Estimated annual pipeline RCN pipeline depreciation is approximately \$ 2.5 Million per year.

**Table 3
Pumping System Facility Valuation Summary**

Lift Station ID	Capacity (d) (gpm)	Replacement Cost New Method															
		Replacement Cost New (RCN) (e)			Age (f)		Accumulated Depreciation			RCNLD							
		Equipment	Structure	Total	Equip.	Struc.	Equipment	Structure	Total	Equipment	Structure	Total					
LS 01	(a)(c)	6625															(g)
LS 02	(a)(c)	1185															(g)
LS 03	(c)	100	\$35,600	\$205,000	\$240,600	1	3	\$6,200	\$12,300	\$18,500	\$29,400	\$192,700	\$222,100				(g)
LS 04		300	\$25,000	\$232,000	\$257,000	0	2	\$0	\$9,300	\$9,300	\$25,000	\$222,700	\$247,700				
LS 05		195	\$20,000	\$221,000	\$241,000	32	34	\$20,000	\$150,300	\$170,300	\$0	\$70,700	\$70,700				
LS 06		180	\$16,000	\$222,000	\$238,000	29	31	\$16,000	\$137,600	\$153,600	\$0	\$84,400	\$84,400				
LS 07		140	\$10,000	\$222,000	\$232,000	5	7	\$2,500	\$31,100	\$33,600	\$7,500	\$190,900	\$198,400				
LS 08		230	\$23,000	\$223,000	\$246,000	1	3	\$1,200	\$13,400	\$14,600	\$21,800	\$209,600	\$231,400				
LS 09	(h)																
LS 10	(a)	4050	\$247,100	\$643,500	\$890,600	17	51	\$210,000	\$642,700	\$852,700	\$37,100	\$800	\$37,900				
LS 11		185	\$24,400	\$215,000	\$239,400	1	3	\$1,200	\$12,900	\$14,100	\$23,200	\$202,100	\$225,300				
LS 12	(b)	485	\$32,000	\$262,500	\$294,500	18	20	\$28,800	\$104,700	\$133,500	\$3,200	\$157,800	\$161,000				
LS 13		125	\$11,000	\$220,000	\$231,000	5	7	\$2,800	\$30,800	\$33,600	\$8,200	\$189,200	\$197,400				
LS 14		105	\$16,000	\$210,000	\$226,000	6	8	\$4,800	\$33,600	\$38,400	\$11,200	\$176,400	\$187,600				
LS 15		140	\$10,000	\$224,000	\$234,000	4	6	\$2,000	\$26,900	\$28,900	\$8,000	\$197,100	\$205,100				
Totals			\$470,100	\$3,100,000	\$3,570,100			\$295,500	\$1,205,600	\$1,501,100	\$174,600	\$1,894,400	\$2,069,000				

Source: City of Paso Robles GIS/Asset data, 8/2009.

Note: Depreciation assumes 20 yr life for equipment and 50 yr life for structures

(a) Includes \$40,000 for building structure

(b) Includes \$7,500 for structural wall

(c) Includes cost for backup generator per Means 26 32 13.16

(d) Source: City of Paso Robles

(e) Source: Kennedy/Jenks Consultants

(f) Source: City of Paso Robles

(g) Values included in current debt totals

(h) Lift Station No. 9 was eliminated by the construction of a new gravity sewer

Table 4
Wastewater Treatment Plant (WWTP) Valuation - Components to be Retained

Asset Description	Date of Construction	Estimated Original Cost	Replacement Cost New	Age	Accumulated Depreciation Rep. Costs (c)	Replacement Cost New Less Depreciation
Sludge Dewatering System			(a)			(a)
Sludge System Upgrade			(a)			(a)
Chlorine Contact Basin			(a)			(a)
WWTP Solids Handling Facilities			(a)			(a)
Primary Sedimentation Basin No. 1 (b)	1970	\$65,500	\$424,600	41	\$348,200	\$76,400
Primary Sedimentation Basin No. 2 (b)	1970	\$65,500	\$424,600	41	\$348,200	\$76,400
Digester Structure (b)	1970	\$56,500	\$366,200	41	\$300,300	\$65,900
Totals		\$187,500	\$1,215,400		\$996,700	\$218,700

(a) Values are included in current debt totals.

(b) Pg 64, City of Paso Robles Property Accounting Ledger Report. February, 1983.

(c) Based on useful life of 50 years.

Table 5
2002 Wastewater System Capital Financing Program

Fiscal Year	Principal	Interest	Totals
FY 11	\$205,000	\$322,319	\$527,319
FY 12	\$210,000	\$315,554	\$525,554
FY 13	\$215,000	\$308,204	\$523,204
FY 14	\$225,000	\$300,410	\$525,410
FY 15	\$235,000	\$291,973	\$526,973
FY 16	\$240,000	\$282,573	\$522,573
FY 17	\$250,000	\$272,973	\$522,973
FY 18	\$260,000	\$262,723	\$522,723
FY 19	\$275,000	\$251,803	\$526,803
FY 20	\$285,000	\$239,978	\$524,978
FY 21	\$295,000	\$227,438	\$522,438
FY 22	\$310,000	\$214,163	\$524,163
FY 23	\$330,000	\$200,213	\$530,213
FY 24	\$345,000	\$184,538	\$529,538
FY 25	\$365,000	\$168,150	\$533,150
FY 26	\$380,000	\$150,813	\$530,813
FY 27	\$395,000	\$132,763	\$527,763
FY 28	\$415,000	\$114,000	\$529,000
FY 29	\$435,000	\$93,250	\$528,250
FY 30	\$455,000	\$71,500	\$526,500
FY 31	\$475,000	\$48,750	\$523,750
FY 32	\$500,000	\$25,000	\$525,000
Totals	\$7,100,000	\$4,479,081	\$11,579,081

Source: City of Paso Robles, Finance. Assets include WWTP solids handling facilities and Lift Stations 1 & 2.

**Table 6
Wastewater C.I.P Budget**

Project ¹	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	FY 2023-24	FY 2024-25	FY 2025-26	TOTAL PROJECT COST ²
Wastewater Collection System Projects:																		
1 Phase I, sewer service expansion to West Airport Area (West Dry Creek Rd and Airport Rd)									\$4,050,964									\$4,051,000
Phase II, sewer service expansion to South Airport Area (East Dry Creek Road)											\$503,283	\$1,570,243	\$544,351					\$2,617,900
2 Lift station rehabilitation to upgrade obsolete pumps, rails, and motors and to provide longer response time	\$110,701	\$115,129	\$119,734	\$124,524	\$129,504	\$134,685	\$140,072	\$145,675	\$151,502	\$157,562	\$163,864	\$170,419	\$177,236	\$184,325	\$191,698	\$199,366	\$207,341	\$2,623,300
3 LS1 and T11 Lift Station #1 Capacity Expansion													\$2,714,363					\$2,714,400
4 LS 12 Lift Station #12 Capacity Expansion													\$1,648,755					\$1,648,800
5 Rehab various sewerlines	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$790,824	\$822,457	\$855,356	\$889,570	\$925,153	\$962,159	\$1,000,645	\$1,040,671	\$1,082,298	\$1,125,590	\$1,170,613	\$1,217,438	\$14,382,800
6 Rehab/replace old manholes	\$100,000	\$104,000	\$108,160	\$112,486	\$116,986	\$121,665	\$126,532	\$131,593	\$136,857	\$142,331	\$148,024	\$153,945	\$160,103	\$166,507	\$173,168	\$180,094	\$187,298	\$2,369,800
8 W1 Riverside Interceptor			\$389,376															\$389,400
9 W3 - 36th Street Sewer Service Area							\$295,033											\$295,000
12 W7 - 12th St between Vine and Olive Sewer Upgrade									\$66,861									\$66,900
13 Re-coating of north/south pipe bridges			\$162,240															\$162,200
15 Buena Vista - Cuesta College Carryover Projects (LS#12 & West Side Sewer), as of 6-30-2010		\$30,000																\$30,000
		\$559,766																\$559,800
Collection System Subtotal =	\$710,700	\$1,308,900	\$1,279,500	\$737,000	\$746,500	\$1,047,200	\$1,384,100	\$1,132,600	\$5,295,800	\$1,225,000	\$1,777,300	\$7,258,400	\$1,922,400	\$1,433,100	\$1,490,500	\$1,550,100	\$1,612,100	\$31,911,300
Wastewater Treatment Plant Improvement Project:																		
17 WWTP upgrade to 4.9 MGD Advanced Secondary Treatment Process ³	\$2,200,000	\$1,871,755	\$2,274,262	\$6,822,787	\$14,782,705	\$14,782,705	\$6,822,787											\$49,557,000
Wastewater Treatment Plant Subtotal =	\$2,200,000	\$1,871,800	\$2,274,300	\$6,822,800	\$14,782,700	\$14,782,700	\$6,822,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,557,000
Grand Total Planned Capital Expenditures	\$2,910,700	\$3,180,700	\$3,553,800	\$7,559,800	\$15,529,200	\$15,829,900	\$8,206,900	\$1,132,600	\$5,295,800	\$1,225,000	\$1,777,300	\$7,258,400	\$1,922,400	\$1,433,100	\$1,490,500	\$1,550,100	\$1,612,100	\$81,468,300

¹ Primary source for projects listed is the Collection System Master Plan by Boyle Engineering Corp dated January 2007.
² Total Project Costs have both been adjusted to current dollars using ENR 20 Cities Construction Cost Indexes and adjusted for inflation at 4%/year.
³ Wastewater Treatment Plant Upgrade Cost by Black and Veatch, April 2011

Table 7
WWTP Valuation - New Facility Upgrade Project

Wastewater Treatment Plant (WWTP)	
Summary Information	
<u>Financing Criteria (a)</u>	
Amount of Issue	\$47,757,000
Interest Rate (SRF)	3.4%
Term (Yrs)	20
Total Annual Debt Service (b)	\$3,330,000
<u>Proposed Bonded Debt Service</u>	
Debt Service Pmt	\$3,330,000
TCSD Share (@ 9%)	\$299,700
Net Paso Robles Share	\$3,030,300
<u>Estimated Total Project Costs</u>	
Total Costs of New WWTP	\$66,600,000
TCSD Share (@ 9%)	\$5,994,000
Net Paso Robles Share	\$60,606,000

(a) Assumes SRF Financing, minimal issuance costs.

(b) Includes principal and interest.

Note: Values are rounded.

Table 8
Wastewater System Valuation Summary

Description	Replacement Cost New	Accumulated Depreciation	Replacement Cost New Less Depreciation
<u>Existing Facilities/Assets</u>			
Collection System	\$189,617,900	\$56,528,100	\$133,089,700
Pumping System	\$3,570,100	\$1,501,100	\$2,069,000
WWTP Cash-based Assets	\$1,215,400	\$996,700	\$218,700
WWTP Debt-based Assets	\$11,579,081		\$11,579,081
Subtotal	\$205,982,481	\$59,025,900	\$146,956,481
<u>Future Facilities</u>			
Total City CIP (Less New WWTP)	\$31,911,300	na	\$31,911,300
WWTP (City Only Costs, Including Debt)	\$60,606,000	na	\$60,606,000
Subtotal	\$92,517,300	na	\$92,517,300
Total Wastewater System Value	\$298,499,800	-	\$239,473,800

Note: Estimated annual pipeline depreciation is approximately \$2.5 Million per year.

Table 9
Wastewater System Discharge Summary

Description	Discharge Values
<u>Existing Flows</u>	
Current WWTP Avg. Flow (mgd) (a)	3.0
Templeton CSD Avg. Flow (mgd) (b)	0.192
Existing City Wastewater Flow (mgd)	2.81
<u>Future Flows</u>	
Buildout WWTP Flow (mgd) (c)	4.84
Contractual Templeton CSD Flow (mgd)	0.443
Projected City Wastewater Flow (mgd)	4.397
<u>Growth's Use of Future System</u>	
Percent of Capacity for Growth	36.1%
Cost Allocated to Growth	\$86,541,700
Single Family Discharge (gpd) = 1 EDU	200
Existing PR System Discharge (edus)	14,040
Future System Discharge (edus)	21,985
Net Increase (edu's)	7,945

Note: Estimated annual pipeline depreciation is approximately \$ 2.5 Million per year.

(a) Average of 2006 through 2010 WWTP flows.

(b) Templeton CSD's average flow from January 08' to December 10'.

July 2009. Includes contribution from a 1,500 person California Youth Authority facility.

(c) Table 3-15 of "City of Paso Robles Wastewater Treatment Plant Upgrade Facility Plan",
July 2009. Includes contribution from a 1,500 person California Youth Authority facility.

**Table 10
Proposed Wastewater Facility Charges**

Description	Proposed Facility Charges		
<u>Proposed Facility Charges</u>		<u>Discharge Values</u>	
Total System Value		\$239,473,800	
Total Discharge - 1,000 gpd		4,397	
Total Discharge - EDU's		21,985	
System Capacity Cost (\$/1,000 gpd)		\$54,500	
System Capacity Cost (\$/edu)		\$10,900	
<u>Residential Charges - Per Unit</u>	<u>gpd/DU (b)</u>	<u>EDUs</u>	<u>Proposed Charges</u>
Single Family Dwelling	200	1	\$10,900
Multi Family Dwelling	180	0.90	\$9,800
<u>Non-Residential Charges - Per Meter Size</u>	<u>Meter Size</u>	<u>EDUs *</u>	<u>Proposed Charges</u>
Non-Residential Account - All Types	5/8 & 3/4	1.00	\$10,900
	1	1.67	\$18,200
* Where EDU ratio/meter size is equal to	1.5	3.33	\$36,300
Water Meter Capacity Ratio; Charges for	2	5.33	\$58,100
meters greater than 3-inch will be the greater	3	10.00	\$109,000
of meter size vs estimated actual values.	4	16.67	\$181,700
	6	33.33	\$363,300
	8	53.33	\$581,300

**Table 11
Proposed Wastewater Facility Charges Phasing Schedule**

Description		Proposed Facility Charges		
		FY 11-12	FY 12-13	FY 13-14
<u>Residential Charges - Per Unit</u>		<u>gpd/DU (b)</u>	<u>Charge/Dwelling Unit</u>	<u>Charge/Dwelling Unit</u>
Single Family Dwelling	200	\$7,300	\$9,100	\$10,900
Multi Family Dwelling	180	\$6,570	\$8,190	\$9,800
<u>Non-Residential Charges - Per Meter Size</u>		<u>Meter Size</u>	<u>Charge/Meter Size</u>	<u>Charge/Meter Size</u>
Non-Residential Account - All Types	5/8 & 3/4	\$7,300	\$9,100	\$10,900
	1	\$12,200	\$15,200	\$18,200
* Where EDU ratio/meter size is equal to	1.5	\$24,300	\$30,300	\$36,300
Water Meter Capacity Ratio; Charges for	2	\$38,900	\$48,500	\$58,100
meters greater than 3-inch will be the greater	3	\$73,000	\$91,000	\$109,000
of meter size vs estimated actual values.	4	\$121,700	\$151,700	\$181,700
	6	\$243,300	\$303,300	\$363,300
	8	\$389,300	\$485,300	\$581,300

Notes: Charges are scheduled to be effective July 1 of each Fiscal Year.

Table 12
WWTP Valuation - Conventional Financing

Wastewater Treatment Plant (WWTP)	
Summary Information	
<u>Financing Criteria (a)</u>	
Amount of Issue	\$55,057,000
Interest Rate	5.7%
Term (Yrs)	30
Total Annual Debt Service (b)	\$3,872,300
<u>Proposed Bonded Debt Service</u>	
Debt Service Pmt	\$3,872,300
TCSD Share (@ 9%)	\$348,500
Net Paso Robles Share	\$3,523,800
<u>Estimated Total Project Costs</u>	
Total Costs of New WWTP	\$116,169,000
TCSD Share (@ 9%)	\$10,455,200
Net Paso Robles Share	\$105,713,800

(a) Assumes Conventional Financing; August 2011.

(b) Includes principal and interest.

Note: Values are rounded.

Table 13
Alternative Wastewater Facility Charges - Conventional Financing

Description	Proposed Facility Charges		
<u>Proposed Facility Charges</u>		<u>Discharge Values</u>	
Total System Value		\$284,581,600	
Total Discharge - 1,000 gpd		4,397	
Total Discharge - EDU's		21,985	
System Capacity Cost (\$/1,000 gpd)		\$64,700	
System Capacity Cost (\$/edu)		\$12,900	
<u>Residential Charges - Per Unit</u>	<u>gpd/DU (b)</u>	<u>EDUs</u>	<u>Proposed Charges</u>
Single Family Dwelling	200	1	\$12,900
Multi Family Dwelling	180	0.90	\$11,600
<u>Non-Residential Charges - Per Meter Size</u>	<u>Meter Size</u>	<u>EDUs *</u>	<u>Proposed Charges</u>
Non-Residential Account - All Types	5/8 & 3/4	1.00	\$12,900
	1	1.67	\$21,500
* Where EDU ratio/meter size is equal to	1.5	3.33	\$43,000
Water Meter Capacity Ratio; Charges for	2	5.33	\$68,800
meters greater than 3-inch will be the greater	3	10.00	\$129,000
of meter size vs estimated actual values.	4	16.67	\$215,000
	6	33.33	\$430,000
	8	53.33	\$688,000

Note: Alternative facility charges assumes SRF funds are not available and conventional financing is required; Aug 2011.

Appendix A

Miscellaneous Supporting Tables

Appendix A
Wastewater Collection System
Estimated Unit Costs and Useful Life Values

Pipe Diameter	<u>PIPELINE UNIT COSTS</u>			<u>USEFUL LIFE (d)</u>	
	2007 Master Plan (a)	2011 PVC (b)	2011 VCP (c)	Pipe Material	Estimated Life
4	\$169	\$197	\$197		
6	\$192	\$224	\$224	PVC	75
8	\$216	\$250	\$250	VCP	100
10	\$243	\$281	\$281	Other	50
12	\$271	\$316	\$316		
15	\$313	\$364	\$373		
18	\$368	\$428	\$445		
21	\$429	\$499	\$521		
24	\$475	\$552	\$583		
27	\$543	\$631	\$668		
30	\$616	\$716	\$758		
36	\$775	\$901	\$967		

(a) Piping Improvement Projects Cost Criteria - City of El Paso De Robles Sewer Collection System Master Plan, January 2007. 4" and 6" costs are interpolated. Sited costs per foot are for PVC.

(b) Escalated per ENR Construction Cost Index - June 2006 - January 2011.

(c) Based on installed pipe costs for PVC in Sewer Master Plan. Adjusted per ENR and for materials cost difference between PVC and VCP.

(d) Source: General estimates based on manufacturer's claims and typical field results. Life expectancy values may vary depending on internal and external corrosive conditions and protections. AC, DI, Steel, and Transite are assumed to be lined.

**Appendix A - Paso Robles Wastewater Rate Study
Local Agency Wastewater Facility Charges**

	WW Facility Charges	WW Facility Charges
	Residential	Non-Residential
City of San Luis Obispo	\$3,953/EDU	\$4,091/EDU 1" - 2 EDU - \$8,181 1 1/2" - 4 EDU - \$16,362 2" - 6.4 EDU - \$26,179 3" - 14 EDU - \$57,268 4" - 22 EDU - \$89,992 6" - 45 EDU - \$184,074
Templeton CSD	\$5,441/EDU	\$5,441/EDU
City of Arroyo Grande	SFR - \$1,030/EDU MFR - \$762/EDU Mobile Home - \$844/EDU	5/8" - \$1,030 3/4" - \$1,542 1" - \$2,575 1 1/2" - \$5,149 2" - \$8,239 3" - \$15,446 4" - \$25,744 6" - \$51,488 8" - \$102,978 10" - \$154,466 12" - \$226,550
City of Grover Beach	5/8" - \$1,073 3/4" - \$1,610 1" - \$2,683 1 1/2" - \$5,364 2" - \$8,583 3" - \$16,093 4" - \$26,822 6" - \$53,645 8" - \$85,832 10" - \$128,747 12" - \$171,663	Same as residential
City of Morro Bay	1" - \$4,178 1 1/2" - \$8,357 2" - \$16,713 3" - \$26,740	Same as residential
Nipoma CSD	<= 1" - \$7,625 1 1/2" - \$22,874 2" - \$36,598 3" - \$68,621 4" - \$114,368 6" - \$228,736	Same as residential
Oceano CSD	SFR - \$2,475 Apartments - \$2,475	Hotel - \$1,237 (per room) Hybrid Use - \$1,650 Condominium - \$2,475 (per unit) Mobile Home Park - \$2,475 5/8" - \$2,475 3/4" - \$2,475 1" - \$6,000 1 1/2" - \$13,000 2" - \$24,000 3" - \$54,450

Source: Kennedy/Jenks Survey of Rates and Charges as of 4/18/2011.

**Appendix A
Wastewater Collection System
Pipeline Asset Values**

Facility ID	Year Built	Length (ft)	Diameter (in)	Material	Age	Useful Life	Years Left	Asset Value Using Current Replacement Costs			
								Replacement Cost New (RCN)	Annual Depreciation	Accumulated Depreciation	RCN Less Depreciation (RDNLD)
1189	1970	191.4	10	AC	41	50	9	\$53,779	\$1,076	\$44,099	\$9,680
1329	1977	523.9	10	AC	34	50	16	\$147,216	\$2,944	\$100,107	\$47,109
1416	1966	144.3	6	AC	45	50	5	\$32,341	\$647	\$29,107	\$3,234
1417	1966	73.3	6	AC	45	50	5	\$16,429	\$329	\$14,786	\$1,643
1593	1966	70.8	6	AC	45	50	5	\$15,872	\$317	\$14,285	\$1,587
1657	1977	402.6	6	AC	34	50	16	\$90,230	\$1,805	\$61,357	\$28,874
1800	1956	265.3	6	AC	55	50	0	\$59,462	\$1,189	\$59,462	\$0
1803	1956	205.6	6	AC	55	50	0	\$46,085	\$922	\$46,085	\$0
1804	1956	347.5	6	AC	55	50	0	\$77,890	\$1,558	\$77,890	\$0
1805	1956	233.3	6	AC	55	50	0	\$52,289	\$1,046	\$52,289	\$0
8974	1956	68.1	6	AC	55	50	0	\$15,256	\$305	\$15,256	\$0
917	1988	576.7	10	DI	36	50	14	\$34,878	\$730	\$34,878	\$78,854
2061	1975	787.8	10	DI	36	50	14	\$159,380	\$3,188	\$159,380	\$61,981
2062	1975	562.6	10	DI	36	50	14	\$113,823	\$2,277	\$113,823	\$44,264
2063	1975	1025.9	10	DI	36	50	14	\$207,546	\$4,151	\$207,546	\$80,712
2064	1975	651.8	10	DI	36	50	14	\$131,864	\$2,637	\$131,864	\$51,280
2065	1975	126.7	10	DI	36	50	14	\$25,637	\$513	\$25,637	\$9,970
2182	1975	1077.3	10	DI	36	50	14	\$345,447	\$6,909	\$345,447	\$134,341
9175	1975	129.9	10	DI	36	50	14	\$36,498	\$730	\$26,279	\$10,220
9176	1975	595.1	10	DI	36	50	14	\$167,202	\$3,344	\$120,386	\$46,817
1379	2002	365.8	12	HDPE	9	100	91	\$115,445	\$1,154	\$10,390	\$105,055
2054	2001	376.1	20	HDPE	10	100	90	\$167,507	\$1,675	\$16,751	\$150,756
2055	2001	441.0	20	HDPE	10	100	90	\$196,412	\$1,964	\$19,641	\$176,771
2056	2001	357.7	20	HDPE	10	100	90	\$159,332	\$1,593	\$15,933	\$143,398
2057	2001	389.8	20	HDPE	10	100	90	\$173,598	\$1,736	\$17,360	\$156,239
2058	2001	410.9	20	HDPE	10	100	90	\$182,988	\$1,830	\$18,299	\$164,690
2059	2001	338.5	20	HDPE	10	100	90	\$150,766	\$1,508	\$15,077	\$135,690
2060	2001	87.4	20	HDPE	10	100	90	\$38,945	\$389	\$3,894	\$35,050
2206	2002	351.2	18	HDPE	9	100	91	\$156,429	\$1,564	\$14,079	\$142,350
2207	2002	414.1	18	HDPE	9	100	91	\$184,429	\$1,844	\$16,599	\$167,831
2208	2002	309.0	18	HDPE	9	100	91	\$137,627	\$1,376	\$12,386	\$125,241
2209	2002	287.1	18	HDPE	9	100	91	\$127,875	\$1,279	\$11,509	\$116,366
8836	2002	245.9	18	HDPE	9	100	91	\$109,535	\$1,095	\$9,858	\$99,677
8837	2002	324.8	18	HDPE	9	100	91	\$144,636	\$1,446	\$13,017	\$131,619
8838	2002	364.8	18	HDPE	9	100	91	\$162,492	\$1,625	\$14,624	\$147,868
8839	2002	433.0	18	HDPE	9	100	91	\$192,850	\$1,928	\$17,356	\$175,493
8840	2002	370.5	18	HDPE	9	100	91	\$165,021	\$1,650	\$14,852	\$150,169
8841	2002	402.2	18	HDPE	9	100	91	\$179,133	\$1,791	\$16,122	\$163,011
8842	2002	400.7	18	HDPE	9	100	91	\$178,462	\$1,785	\$16,062	\$162,400
8843	2002	398.1	18	HDPE	9	100	91	\$177,326	\$1,773	\$15,959	\$161,367
8844	2002	391.2	18	HDPE	9	100	91	\$174,214	\$1,742	\$15,679	\$158,534
8845	2002	259.8	18	HDPE	9	100	91	\$115,724	\$1,157	\$10,415	\$105,309
8848	2002	386.0	12	HDPE	9	100	91	\$121,833	\$1,218	\$10,965	\$110,868
8849	2002	266.6	18	HDPE	9	100	91	\$118,750	\$1,187	\$10,687	\$108,062
8850	2002	453.6	18	HDPE	9	100	91	\$202,045	\$2,020	\$18,184	\$183,861
8851	2002	293.0	18	HDPE	9	100	91	\$130,490	\$1,305	\$11,744	\$118,746
8852	2002	397.7	18	HDPE	9	100	91	\$177,115	\$1,771	\$15,940	\$161,175
8853	2002	421.7	18	HDPE	9	100	91	\$187,818	\$1,878	\$16,904	\$170,915
8854	2002	400.9	18	HDPE	9	100	91	\$178,567	\$1,786	\$16,071	\$162,496
8855	2002	401.7	18	HDPE	9	100	91	\$178,918	\$1,789	\$16,103	\$162,815
8856	2002	222.2	18	HDPE	9	100	91	\$98,943	\$989	\$8,905	\$90,038
8874	2001	130.2	18	HDPE	10	100	90	\$58,006	\$580	\$5,801	\$52,206
74	1956	380.4	6	ORGB	55	75	20	\$85,260	\$1,137	\$62,524	\$22,736
93	1956	153.0	6	ORGB	55	75	20	\$34,283	\$457	\$25,141	\$9,142
105	1956	281.9	6	ORGB	55	75	20	\$63,192	\$843	\$46,341	\$16,851
106	1956	145.0	6	ORGB	55	75	20	\$32,510	\$433	\$23,841	\$8,669
1554	1998	70.6	6	ORGB	13	75	62	\$15,817	\$211	\$2,742	\$13,075
1555	1998	193.7	6	ORGB	13	75	62	\$43,417	\$579	\$7,526	\$35,891
8	1963	290.8	6	PVC	48	75	27	\$64,912	\$865	\$41,543	\$23,368
20	1963	240.9	6	PVC	48	75	27	\$53,771	\$717	\$34,413	\$19,358
21	1963	66.8	6	PVC	48	75	27	\$14,922	\$199	\$9,550	\$5,372
22	1963	125.6	8	PVC	48	75	27	\$31,534	\$420	\$20,182	\$11,352
26	1963	93.0	8	PVC	48	75	27	\$23,367	\$312	\$14,955	\$8,412
33	1956	188.3	8	PVC	55	75	20	\$47,296	\$631	\$34,684	\$12,612
34	1963	379.4	8	PVC	48	75	27	\$95,272	\$1,270	\$60,974	\$34,298
35	1956	179.9	8	PVC	55	75	20	\$45,175	\$602	\$33,128	\$12,047
38	1989	279.1	8	PVC	22	75	53	\$70,091	\$935	\$20,560	\$49,531
39	1989	379.9	8	PVC	22	75	53	\$95,400	\$1,272	\$27,984	\$67,416
40	1989	366.6	8	PVC	22	75	53	\$92,065	\$1,228	\$27,006	\$65,060
42	1963	189.0	8	PVC	48	75	27	\$47,455	\$633	\$30,372	\$17,084
43	1963	192.4	8	PVC	48	75	27	\$48,321	\$644	\$30,925	\$17,396
44	1963	171.5	8	PVC	48	75	27	\$43,081	\$574	\$27,572	\$15,509
45	1963	200.6	8	PVC	48	75	27	\$50,371	\$672	\$32,237	\$18,133
46	1963	237.8	8	PVC	48	75	27	\$59,717	\$796	\$38,219	\$21,498

Abbreviated list included in Sept 6, 2011, staff report; See full report on-line for complete 38 page pipeline asset list.



MEMORANDUM

To: City Manager, Mayor, and Council Members
From: Matt Thompson, Wastewater Resources Manager
Date: August 15, 2011
Subject: **State of California Clean Water Revolving Fund Loan Program**

One of the key financial elements for City Council to consider when deciding which wastewater rate option to choose is the availability and reliability of the State's Clean Water Revolving Fund loan (SRF) program. We've been planning to finance the City's wastewater treatment plant upgrade with a low-interest loan from the SRF program. I've researched the SRF program and questioned those who administer the program. Here are some relevant facts about the SRF program:

- The Governor or State Legislature has never threatened to take money from the SRF program to fix the State budget.
- The SRF was created by the Federal Clean Act to provide financial assistance for clean water projects such as our upgrade. State Water Resources Control Board administers the program in California. The California Water Code precludes use of SRF funds for anything other than clean water projects. Water Code Section 13480 states:

“Moneys in the fund shall be used only for the permissible purposes allowed by the federal act, including providing financial assistance for...the construction of publicly owned treatment works.”

- According to the SRF Program's 2010/2011 business plan:

“The SRF Program operates much like an environmental infrastructure bank capitalized with federal, state, and local contributions. The SRF provides financial assistance to communities with the capital contributions, and then uses the revenue generated by those contributions, principal and interest payments and investment earnings, to fund additional water quality projects. The revolving nature of the SRF Program provides a sustainable source of funds for water quality protection and improvement.

California's SRF has grown since its beginnings in 1989. It has executed more than \$5.2 billion in financial agreements. The Net Assets of the Program exceed

\$2.9 billion, and its annual revenue after debt service is approximately \$195 million.”

- Due to the growth of the SRF program, the program has become less dependent on federal subsidies. Although the federal government recently cut its subsidies back to 2008 funding levels, the SRF program has good cash flow and is actively seeking new loan commitments.
- The SRF program can sell revenue bonds if needed to capitalize the program. SRF program last sold bonds in 2002. Moody’s, Standard & Poor’s, and Fitch have all given the SRF program an AAA rating with a stable outlook. Fitch reaffirmed its rating in June 2011. Fitch’s press release states its rationale for the good rating is:

“--Overcollateralization and reserves allows the program to withstand significant borrower defaults.

--The portfolio exhibits strong loan security as most loans are backed by wastewater revenue pledges.

--Loan repayments are strong with currently no delinquencies or defaults from pledged borrowers.”

Attachment 6
Alternative Resolutions

RESOLUTION NO. 11-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
PROPOSING WASTEWATER USER RATES
AND AUTHORIZING INITIATION OF THE PROCEDURES REQUIRED BY ARTICLE XIID
OF THE CALIFORNIA CONSTITUTION FOR ADOPTION

WHEREAS, improvements to the City wastewater system are needed, primarily to upgrade the community's wastewater treatment plant to comply with state-mandated discharge requirements, to protect public health and safety, and to provide reliable wastewater collection and adequate staffing levels; and

WHEREAS, the planned improvements, as outlined in the 2009 Wastewater Treatment Plant Upgrade Facility Plan and the 2007 Integrated Water Resources Plan and Capital Improvement Program, amount to approximately \$81 million over the next 16 years, including the treatment plant upgrade capital costs, other collection system capital costs, and financing and operational costs; and

WHEREAS, on May 5, 2009, the City Council directed that a study of wastewater rates and wastewater facility charges be prepared in light of both the treatment plant upgrade and other planned wastewater system improvements; and

WHEREAS, on July 5, 2011, the Regional Water Quality Control Board issued Time Schedule Order No. R3-2011-0213 establishing interim discharge limits provided that the City adopt both new wastewater user rates and facility charges and proceed with the treatment plant upgrade by specified deadlines; and

WHEREAS, the revenues generated by the existing wastewater rate structure are inadequate to sustain safe, reliable and high quality wastewater system operations in compliance with California Regional Water Quality Control Board and other requirements; and

WHEREAS, while the City is pursuing a low-interest State Revolving Fund Loan to finance the plant upgrade, there is no guarantee that such financing will be available at the time of construction; and

WHEREAS, the City wishes to ensure the ability to reliably meet community sewer needs, protect the Salinas River corridor, and improve job safety conditions, especially at the wastewater treatment plant; and

WHEREAS, a uniform rate structure in which users pay according to the estimated wastewater discharge will provide the necessary funding to provide a reliable, well-maintained, infrastructure system to serve the needs of its existing and future customers.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1 The City Council of the City of El Paso de Robles does hereby propose to adopt a uniform rate structure for the purpose of providing a reliable, well-maintained, infrastructure system, as described in Exhibit A, attached hereto and incorporated herein by reference.

SECTION 2 That the City Council hereby authorizes City staff to initiate the necessary procedures required by Article XIID of the California Constitution to adopt the proposed wastewater rate structure.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 6th day of September 2011 by the following votes:

AYES:

NOES:

ABSTAIN:

ABSENT:

ATTEST:

Duane J. Picanco, Mayor

Dennis Fansler, City Clerk

EXHIBIT A

**PROPOSED UNIFORM WASTEWATER USAGE RATES
OPTION A**

User Class (All Customers)	Usage Charge \$/HCF				
	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
All Water Usage	\$5.40	\$7.13	\$9.41	\$10.35	\$10.35

RESOLUTION NO. 11-YY

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
PROPOSING WASTEWATER USER RATES
AND AUTHORIZING INITIATION OF THE PROCEDURES REQUIRED BY ARTICLE XIID
OF THE CALIFORNIA CONSTITUTION FOR ADOPTION

WHEREAS, improvements to the City wastewater system are needed, primarily to upgrade the community's wastewater treatment plant to comply with state-mandated discharge requirements, to protect public health and safety, and to provide reliable wastewater collection and adequate staffing levels; and

WHEREAS, the planned improvements, as outlined in the 2009 Wastewater Treatment Plant Upgrade Facility Plan and the 2007 Integrated Water Resources Plan and Capital Improvement Program, amount to approximately \$81 million over the next 16 years, including the treatment plant upgrade capital costs, other collection system capital costs, and financing and operational costs; and

WHEREAS, on May 5, 2009, the City Council directed that a study of wastewater rates and wastewater facility charges be prepared in light of both the treatment plant upgrade and other planned wastewater system improvements; and

WHEREAS, on July 5, 2011, the Regional Water Quality Control Board issued Time Schedule Order No. R3-2011-0213 establishing interim discharge limits provided that the City adopt both new wastewater user rates and facility charges and proceed with the treatment plant upgrade by specified deadlines; and

WHEREAS, the revenues generated by the existing wastewater rate structure are inadequate to sustain safe, reliable and high quality wastewater system operations in compliance with California Regional Water Quality Control Board, and other requirements; and

WHEREAS, the City is pursuing a low-interest State Revolving Fund Loan to finance the plant upgrade and is planning that such financing will be available at the time of construction; and

WHEREAS, the City wishes to ensure the ability to reliably meet community sewer needs, protect the Salinas River corridor, and improve job safety conditions especially at the treatment plant; and

WHEREAS, a uniform rate structure in which users pay according to the estimated wastewater discharge will provide the necessary funding to provide a reliable, well-maintained, infrastructure system to serve the needs of its existing and future customers.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1 The City Council of the City of El Paso de Robles does hereby propose a uniform rate structure for the purpose of providing a reliable, well-maintained, infrastructure system, as described in Exhibit A, attached hereto and incorporated herein by reference.

SECTION 2 That the City Council hereby authorizes City staff to initiate the necessary procedures required by Article XIID of the California Constitution to adopt the proposed wastewater rate structure.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 6th day of September 2011 by the following votes:

AYES:

NOES:

ABSTAIN:

ABSENT:

Duane J. Picanco, Mayor

ATTEST:

Dennis Fansler, City Clerk

EXHIBIT A

**PROPOSED UNIFORM WASTEWATER USAGE RATES
OPTION B**

User Class (All Customers)	Usage Charge \$/HCF				
	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
All Water Usage	\$4.50	\$5.40	\$6.30	\$7.35	\$7.80