

# WATER CONNECTION FEE

CITY OF STOCKTON  
NOVEMBER 16, 2004

**FINAL**



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## **INTRODUCTION**

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This report presents a financing plan to expand the City of Stockton's water system to accommodate growth for the next 20 years and build out of the current General Plan. The report provides the justification for adoption of an increased water connection fee to fund projects needed for system expansion. This fee is in addition to the City's current water connection fee. The water connection fee will be collected in two components:

- ◆ Water Connection Fee – Meter (Existing): Collected per meter size and funds new water meters.
- ◆ Water Connection Fee – Capital Projects (New): Collected per dwelling unit equivalent (DUE) and funds projects that provide water supply, storage, and distribution to serve new development.

The new Water Connection Fee - Capital Projects will be collected within areas served by the City, excluding the central part of the City served by the California Water Service Company (Cal Water). The fee fulfills Section 16-355.270 of the City's Development Code that required new development to mitigate its impact on public facilities within the City of Stockton.

The financing plan meets the City's objectives by:

- ◆ Fully funding the facilities needed to accommodate growth with revenues generated by development that will benefit from the facilities; and
- ◆ Generate funds in a timely manner such that new facilities can be installed in advance of the development that the facilities are needed to serve.

The financing plan uses the new component of the water connection fee to leverage debt financing to fund construction of several facilities in FY 2004-05. Additional facilities are programmed and funded on a pay-as-you-go (PAYGO) basis through the end of the financing plan.

More facilities will be needed to serve development beyond this planning horizon. Stockton MUD is in the process of preparing a final plan for these additional facilities, including the Delta Water Project. This fee will need to be reviewed and updated to reflect updated project and land use assumptions based on the new General Plan presently being completed.

The financing plan determines the maximum justified cost of providing facilities and then determines the fee necessary to fund the financing plan. To meet statutory requirements (see *Mitigation Fee Act*, below) the financing plan documents a reasonable relationship between development and the new connection fee.

## **MITIGATION FEE ACT FINDINGS**

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The State Legislature adopted Assembly Bill 1600, the *Mitigation Fee Act* (the *Act*), in order to guide the widespread imposition of development impact fees. The *Act*, which is contained in *California Government Code* Section 66000 *et seq.* and which became law in January 1988, establishes requirements for the imposition and administration of impact fee programs. According to the *Act*, local governments must document five findings when adopting an impact fee: purpose of fee, use of fee revenues, benefit relationship, burden relationship, and proportionality. The findings relevant to enforcement of the act in Stockton are summarized below and supported in detail by analysis explained later in the report. All statutory references are to the *Act*.

### **Purpose of Fee**

For the first finding the City must:

Identify the purpose of the fee. (§66001(a)(1))

The City is obligated to deliver water to all areas within its urban service boundary. According to Section 16-355.270 of the City's Development Code, in order to implement the goals and objectives of the General Plan and to mitigate the impacts caused by future development in Stockton certain public facilities must be or have been required to be constructed, and/or compensation measures must have been required to be taken to offset resources lost due to future development. The Council has determined that a public facilities fee is needed in order to finance these public facilities, and/or compensation measures, and to pay for each development's fair share of the construction costs of these improvements, and/or the costs of the compensation measures.

The increased water system connection fee will allow the City to finance facilities with charges on new service connections. Thus, the fee increase advances two legitimate interests of the City: funding service extensions and limiting the financial burden to areas served by those extensions.

### **Use of Fee Revenues**

For the second finding the City must:

Identify the use to which the fee is to be put. If the use is financing public facilities, the facilities shall be identified. That identification may, but need not, be made by reference to a capital improvement plan as specified in Section 65403 or 66002, may be made in applicable general or specific plan requirements, or

may be made in other public documents that identify the public facilities for which the fee is charged. (§66001(a)(2))

The water system connection fee increase would fund design and construction of new drinking water wells, transmission lines, and storage facilities to increase the capacity of the City of Stockton's water system. Planned facilities to be funded by the fee are described in the *Facilities to Serve New Development* section of this report.

## **Benefit Relationship**

For the third finding the City must:

Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed. (§66001(a)(3))

The City will restrict the use of fee revenues to water system capacity expansion costs, including financing costs. The facilities funded by the fee will serve and benefit development paying the fee. Planned facilities to be funded by the fee are described in the *Facilities to Serve New Development* section of this report.

## **Burden Relationship**

For the fourth finding the City must:

Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed. (§66001(a)(4))

The need for the fee is based on the water facility demand standards identified in this report as applied to new development throughout the City. Demand standards are represented as water flow per unit of development by land use type based on the City's design standards for water facilities. These standards represent the level of service that the City plans to provide to new development. Facility standards are described the *Water System Standards* section of this report.

## **Proportionality**

For the fifth finding the City must:

Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed. (§66001(b))

The new water connection fee is based on total facilities costs, including financing costs, divided by the total amount of new development to be served by the facilities. The water system connection fee per unit of development is expressed per DUE. A DUE is a measure of demand for water facilities where one residential dwelling unit equals one DUE. Demand per unit for all other land use types is expressed relative to this unit of measurement. The fee is set to fully fund programmed water system facilities to serve new development through build out of the current General Plan.

Each development project pays a fee equal to the number of DUEs associated with the project multiplied by the connection fee per DUE. In this way, the total fee for each development is reasonably related to the portion of water facilities attributable to the development.

See the *Absorption Schedule* section for an explanation of the projection of DUEs served by the new water facilities. See the *Water System Connection Fee* sections, for a presentation of the connection fee.

## Conclusion

The financing plan described in this report meets the requirements of the *Act* by ensuring that the proposed water connection fee is not more than the cost of the facilities needed to accommodate new development paying the fee. The City should ensure that fee revenues are only used for construction of the water facilities identified in this report to accommodate growth, or other facilities for the same purpose that the City may identify. The *Act* also has specific annual and five-year accounting and reporting requirements regarding the receipt and use of fee revenues (see *Implementation* section).

## **ABSORPTION SCHEDULE**

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The financing plan requires an absorption schedule of new development to determine the period over which facilities may be financed. Actual absorption rates may differ from those presented here. The financing plan should be updated periodically to reflect actual absorption rates and their impact on financing costs, facilities, and the required water connection fee.

### **Average Annual Absorption**

The annual rate of absorption is based on an analysis of historical citywide absorption trends for a ten-year period from 1995 through 2004. As shown in **Table 1**, average absorption citywide since 1990 has been 1,321 dwelling units and an estimated 1,881 DUEs, the latter including commercial and industrial development. The City of Stockton has been experiencing a steadily increasing level of residential development in the past five years, surpassing all prior levels. The five years of development history indicates the City has stabilized at this new level of activity. For the reason, the 10-year annual average of 2,167 DUEs is used to project annual absorption for the financing plan.<sup>1</sup>

The use of the ten-year annual average for the financing plan instead of more recent five-year absorption rates is a conservative assumption. This approach ensures that the water connection fee is not underestimated and debt financing costs are fully funded with no negative fund balances. As mentioned above, the financing plan and water connection fee should be reviewed at least every five years and appropriate adjustments made based on recent development trends and facility and financing costs.

This high growth is caused in part by development constraints in neighboring communities related to water capacity, sewer capacity, and growth initiatives. Another key factor is the attraction of commuters from communities with higher housing costs in the Bay Area.

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<sup>1</sup> This data includes the portion of the City served by the California Water Service Company (Cal Water). The Cal Water service area includes the central portion of the City that has had little growth so this data is a reasonable representation of growth in the service area that is the responsibility of the City's Municipal Utilities Department.

**Table 1: Stockton Average Annual Development**

Year	Dwelling Units (DU) <sup>1</sup>	Dwelling Unit Equivalents (DUE) <sup>2</sup>	DU % of DUE
1990	949	1,351	0.70
1991	1,409	1,925	0.73
1992	806	1,054	0.76
1993	930	1,132	0.82
1994	969	1,080	0.90
1995	1,109	1,147	0.97
1996	1,169	1,121	1.04
1997	798	1,103	0.72
1998	577	1,367	0.42
1999	882	1,604	0.55
2000	1,163	2,431	0.48
2001	1,534	2,183	0.70
2002	1,750	2,490	0.70
2003	2,866	4,079	0.70
2004 <sup>3</sup>	<u>2,911</u>	<u>4,143</u>	<u>0.70</u>
Average (1990 - 2004)	1,321	1,881	0.70
Ten Year Average (1995 - 2004)	1,476	2,167	

<sup>1</sup> Based on residential occupancy permits issued.

<sup>2</sup> DUE calculation based on annual New Melones surface water connection fee revenue divided by fee amount. Includes nonresidential as well as residential development. Estimated for 2001 through 2003.

<sup>3</sup> Annualized based on data through 10/31/04 per Steve Escobar.

Source: City of Stockton; MuniFinancial

## Total DUEs and Planning Horizon

As discussed more fully in the *Facilities To Serve New Development* section, planned facilities are anticipated to accommodate 41,323 DUEs. Starting in FY 2004-05, the planning horizon extends through FY 2023-24. **Table 2** summarizes total DUEs served by new water facilities through build out of the current General Plan. The DUEs per acre is explained in more detail in the *Facilities Standards* section.



**Table 2: Total Dwelling Unit Equivalents (DUEs) - General Plan Build Out**

	Low Medium Residential	High Density Residential	Commercial	Industrial	Institutional	Total
Gross Vacant Acres <sup>1,2</sup>	4,247	224	265	1,704	740	7,180
DUEs Per Acre	4.73	32.15	5.56	5.56	4.17	5.76
Total	20,088	7,202	1,473	9,474	3,086	41,323

<sup>1</sup> Per Steve Escobar, City of Stockton Planning, for the City of Stockton service area. Does not include the Cal Water service area.

<sup>2</sup> Assumes multi-family at five percent of remaining vacant land.

Source: City of Stockton; MuniFinancial

## **FACILITIES STANDARDS**

Facility standards are used to determine the capacity needed to accommodate development. Consequently standards provide a reasonable relationship between development and the need for public facilities to serve that development. **Table 3** presents the average flow generation factors for each land use type used by the City of Stockton to determine needed capacity. Residential flow rates by type of land use are based on average of 2.0 acre-feet per acre per year for all residential uses and weighted by the amount of remaining net residential acreage by land use. The table also shows the DUE conversion by land use. These DUE factors are used to allocate project costs among individual developments because they provide a reasonable estimate of each development's demand for water system facilities.

**Table 3: Flow Generation Factors**

	<b>Low Medium Residential</b>	<b>High Density Residential</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Institutional</b>
Acre-Feet / Acre/Year <sup>1</sup>	1.7	10.4	2.0	2.0	1.5
Gallons / Acre-Feet	<u>325,851</u>	<u>325,851</u>	<u>325,851</u>	<u>325,851</u>	<u>325,851</u>
Gallons / Acre/Year	553,947	3,391,215	651,703	651,703	488,777
Days / Year	<u>365</u>	<u>365</u>	<u>365</u>	<u>365</u>	<u>365</u>
GPD / Acre <sup>2</sup>	1,518	9,291	1,785	1,785	1,339
Dwelling Units / Acre	<u>4.73</u>	<u>32.15</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
GPD / DU or Acre <sup>1</sup>	321	289	1,785	1,785	1,339
<b>DUE<sup>2</sup></b>	<b>1.0</b>	<b>0.90</b>	<b>5.56</b>	<b>5.56</b>	<b>4.17</b>

<sup>1</sup> Residential flow rates by type of land use based on average of 2.0 acre-feet per acre per year for all residential uses, weighted by the amount of remaining net residential acreage by land use to General Plan build out.

<sup>2</sup> "GPD" is gallons per day. "DUE" is dwelling unit equivalent.

Source: Table 2; City of Stockton; MuniFinancial

## **FACILITIES TO SERVE NEW DEVELOPMENT**

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The City of Stockton Municipal Utilities Department (Stockton MUD) identified the facilities required to serve new development. Stockton MUD is the primary provider of water delivery within the City of Stockton, particularly to growing areas of the City. The purpose of the new water system connection fee is to provide water facilities to serve new development in Stockton MUD's service area.

**Table 4** summarizes the facilities needed to serve new development, including water supply (wells), transmission mains, and storage reservoirs. Water wells are needed to increase supply. Water mains and reservoirs are needed to deliver water to new development areas and complete transmission loops to maintain reliability. None of these facilities would be needed but for new development.

Additional facilities will be needed to serve development beyond this planning horizon. Stockton MUD is in the process of preparing a final plan for these additional facilities, including the Delta Water Project.

The California Water Service Company (Cal Water) is the only other water provider within the City and its sphere of influence. Cal Water serves the central part of the City that is largely built out. This study does not address any facilities needs of Cal Water.

**Table 4: Water System Projects and Costs**

<b>Project</b>	<b>Financed</b>	<b>PAYGO<sup>1</sup></b>	<b>Total</b>
<b><u>Transmission</u></b>			
South Stockton Aqueduct	\$ 4,425,000	\$ -	\$ 4,425,000
SR 99 Frontage Rd Extension	-	1,920,000	1,920,000
Frontier Wy to Aqueduct	-	1,132,800	1,132,800
Newcastle Waterline Loop	-	4,627,200	4,627,200
Newcastle Extention	-	499,200	499,200
Arch Rd Extention	-	883,200	883,200
Newcastle to Austin, North	-	768,000	768,000
Newcastle to Austin, South	-	1,017,600	1,017,600
McKinley Avenue Waterline	-	691,200	691,200
Highway 99 Crossing at Hammer Lane	<u>1,344,000</u>	<u>-</u>	<u>1,344,000</u>
Subtotal	\$5,769,000	\$11,539,200	\$17,308,200
<b><u>Wells</u></b>			
Water Wells <sup>2</sup>	\$ 5,000,000	\$ -	\$ 5,000,000
<b><u>Storage</u></b>			
Northwest Reservoir/Spanos (1)	\$ 3,200,000	\$ -	\$ 3,200,000
Weston Ranch Reservoir (1)	3,200,000	-	3,200,000
Northeast Reservoir (2)	-	6,400,000	6,400,000
French Camp Reservoir (1)	-	<u>3,200,000</u>	<u>3,200,000</u>
Subtotal	6,400,000	9,600,000	16,000,000
<b>Total</b>	<b>\$17,169,000</b>	<b>\$21,139,200</b>	<b>\$38,308,200</b>

<sup>1</sup> "PAYGO" is pay-as-you-go.

<sup>2</sup> Represents 5 wells at \$1.0 million per well.

Source: City of Stockton; MuniFinancial

## FEE CALCULATION

The new water connection fee is based on new development that generates the need for planned facilities fully funding those facilities. Any debt issued to finance facilities in advance of development should be fully repaid by the end of the absorption period associated with that amount of development. Thus to calculate the maximum justified fee for the new water connection fee, the financing plan sets the debt term equal to the 20-year planning horizon discussed in the *Absorption Schedule* section.

The financing plan used to determine the fee was constructed as an annual cash flow model that balances inflows from revenues with outflows for project and debt service expenditures. The key independent variable in the model is the connection fee per DUE. The fee per DUE is set to fully fund all project costs for programmed facilities summarized in **Table 5** and avoid negative fund balance to serve anticipated growth.

**Table 5: Water Connection Fee**

	Amount	Share
<u><i>Project and Financing Costs</i></u>		
2005 Bonded Construction & Financing Costs		
Bonded Construction Costs	\$ 17,169,000	34%
Net Financing Costs (16-year debt term) <sup>1</sup>	<u>8,603,000</u>	<u>17%</u>
Subtotal Bonded Construction & Financing Costs	\$ 25,772,000	50%
Existing Debt Service		
Pay-As-You-Go Costs	<u>4,139,401</u>	<u>41%</u>
Total Project and Net Financing Costs	\$ 51,049,601	100%
<u><i>Water Connection Fee</i></u>		
Total Project and Financing Costs	\$ 51,049,601	
Total DUEs Served <sup>2</sup>	<u>41,323</u>	
Water Connection Fee Per DUE	\$ 1,235	

<sup>1</sup> Represents costs for debt issuance and interest payments, net of interest earnings on fund balances. Debt is assumed to be repaid over same 16-year period associated with new development that would generate the need for the planned facilities.

<sup>2</sup> "DUE" is dwelling unit equivalents.

Source: Tables 2, 4, and 7; City of Stockton; MuniFinancial.

Use of a cash flow model provides clear documentation of a reasonable relationship between new development, the connection fee per DUE, and the facilities to be funded by the fee because:

- ◆ Debt financing costs can be included in the plan;
- ◆ Interest earnings on fund balances and bond reserves can be appropriately credited to the account; and
- ◆ The fee per DUE can be set so that fund balances at the end of the planning horizon are no greater than at the beginning to ensure that new development does not pay more than its fair share.

Table 5 shows the calculation of the connection fee per DUE based on the financing assumptions in **Table 6** and the cash flow model shown in **Table 7**. The fee represents total programmed project costs, including financing costs, divided by the DUEs served by programmed facilities. **As shown in Table 5 the connection fee per DUE is \$1,235.**

The bond assumptions shown in Table 6 and used in the financing plan in Table 7 do not represent the actual type of financing that Stockton MUD anticipates to fund programmed facilities. The fee will be updated upon the sale of bonds to reflect actual financing costs. The fee will be updated to reflect new project and land use assumptions periodically. The assumptions used here are necessary to develop the maximum justified new water connection fee.

Plan revenues in Table 7 include the new water connection fee per DUE, interest earnings, and debt proceeds. Plan expenditures include bonded project and debt financing costs and pay-as-you-go project costs. The connection fee is set to maintain a positive fund balance through the planning horizon, declining to zero by the end in FY 2023-24. Pay-as-you-go projects are programmed as sufficient revenue is generated to fund their construction.

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**Table 6: Financing Assumptions**


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Use of Debt Proceeds

Bonded Project Construction Cost <sup>1</sup>	\$ 17,169,000
Reserve Fund	2,215,000
Capitalized Interest	2,326,000
Cost of Issuance	<u>443,000</u>
Total Debt Issue	\$ 22,153,000

Financing Assumptions

Annual Interest Rate on Bond	5.25%
Term of Bond (years)	20
Capitalized Interest Period (years)	2
Cost of Issuance (percent of bond issue)	2.0%
Reserve Fund (percent of bond issue)	10.0%
Interest Rate on Average Fund Balance	5.25%

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<sup>1</sup> Includes estimated maximum construction bid plus other project costs such as design, engineering, permitting, right-of-way acquisition, and contingencies.

Source: Table 4; City of Stockton; MuniFinancial

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Table 7: Cash Flow Model

Fiscal Year Ending June 30	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>DUE Absorption Scenario</b>											
DUE Absorption <sup>1</sup>	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167
Beginning Fund Balance	\$ -	\$ 3,816,358	\$ 5,447,667	\$ 4,405,949	\$ 5,278,416	\$ 5,886,253	\$ 6,628,427	\$ 6,713,077	\$ 7,711,126	\$ 5,479,601	\$ 6,408,017
<b>Revenues</b>											
Fee Revenue <sup>2</sup>	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000	\$ 2,678,000
Interest Earnings <sup>3</sup>	216,000	359,000	375,000	371,000	404,000	440,000	467,000	495,000	463,000	428,000	354,000
2005 Bond Issue	-	-	-	-	-	-	-	-	-	-	-
Bond Proceeds	22,153,000	-	-	-	-	-	-	-	-	-	-
Reserve Fund Termination	-	-	-	-	-	-	-	-	-	-	-
Annual revenues	\$ 25,047,000	\$ 3,037,000	\$ 3,053,000	\$ 3,049,000	\$ 3,082,000	\$ 3,118,000	\$ 3,145,000	\$ 3,173,000	\$ 3,141,000	\$ 3,106,000	\$ 3,032,000
<b>Expenditures</b>											
Wells (financed) <sup>4</sup>	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storage (financed)	6,400,000	-	-	-	-	-	-	-	-	-	-
Transmission (financed)	5,769,000	-	-	-	-	-	-	-	-	-	-
Wells (PAYGO) <sup>1,4</sup>	-	-	-	-	-	-	-	-	-	-	-
Transmission (PAYGO) <sup>1</sup>	-	-	1,920,000	-	498,200	-	883,200	-	-	-	4,627,200
Storage (PAYGO)	-	-	-	-	-	-	-	-	-	-	-
2005 Bond Issue	-	-	-	-	-	-	-	-	3,200,000	-	-
Reserve Fund Capitalization <sup>5</sup>	2,215,000	-	-	-	-	-	-	-	-	-	-
Cost of Issuance <sup>5</sup>	443,000	-	-	-	-	-	-	-	-	-	-
Capitalized Interest <sup>5</sup>	1,163,000	1,163,000	-	-	-	-	-	-	-	-	-
Debt Service <sup>5</sup>	-	-	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000
Existing Debt Service	240,642	240,691	240,718	241,533	240,963	240,826	242,150	240,951	241,525	245,584	244,917
Annual Expenditures	\$ 21,230,642	\$ 1,403,691	\$ 4,092,718	\$ 2,173,533	\$ 2,672,163	\$ 2,172,826	\$ 3,057,350	\$ 2,172,951	\$ 5,373,525	\$ 2,177,584	\$ 6,804,117
Annual Net Cash Flow	\$ 3,816,358	\$ 1,633,309	\$ (1,039,718)	\$ 875,467	\$ 409,837	\$ 945,174	\$ 87,650	\$ 1,000,049	\$ (2,232,525)	\$ 928,416	\$ (3,772,117)
Ending Fund Balance	\$ 3,816,358	\$ 5,449,667	\$ 4,407,949	\$ 5,281,416	\$ 5,688,253	\$ 6,631,427	\$ 6,716,077	\$ 7,713,126	\$ 5,478,601	\$ 6,408,017	\$ 2,636,900

<sup>1</sup> DUE<sup>1</sup> is dwelling unit equivalents. PAYGO<sup>1</sup> is pay-as-you-go.

<sup>2</sup> Cost per DUE = \$1,236

<sup>3</sup> Based on 5.25 percent interest rate applied to average annual fund balance.

<sup>4</sup> Assumes cost of \$1,000,000 per well.

<sup>5</sup> Based on 5.25 percent interest rate on debt, 2.0 percent costs of issuance, 10 percent reserve fund, two years capitalized interest, and 20-year term.

Sources: Tables 1, 2, 4, 5, and 6; City of Stockton; MuniFinancial.



Table 7: Cash Flow Model (continued)

Fiscal Year Ending June 30	2016	2017	2018	2019	2020	2021	2022	2023	2024	2005 - 2024
<i>DUE Absorption Scenario</i>										
DUE Absorption <sup>1</sup>	2,167	2,167	2,167	2,167	2,167	2,167	2,167	2,167	156	41,323
Beginning Fund Balance	\$ 2,633,900	\$ 3,405,939	\$ 3,057,881	\$ 3,851,607	\$ 1,401,471	\$ 1,398,135	\$ 2,105,999	\$ 3,851,607	\$ 5,684,253	\$ -
<b>Revenues</b>										
Fee Revenue <sup>2</sup>	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 2,676,000	\$ 192,000	\$ 51,036,000
Interest Earnings <sup>3</sup>	275,000	286,000	298,000	254,000	190,000	208,000	232,000	291,000	381,000	6,784,000
2005 Bond Issue	-	-	-	-	-	-	-	-	-	22,153,000
Bond Proceeds	-	-	-	-	-	-	-	-	-	2,215,000
Reserve Fund Termination	-	-	-	-	-	-	-	-	-	-
Annual revenues	\$ 2,951,000	\$ 2,962,000	\$ 2,974,000	\$ 2,930,000	\$ 2,866,000	\$ 2,884,000	\$ 2,908,000	\$ 4,074,500	\$ 1,680,500	\$ 82,188,000
<b>Expenditures</b>										
Wells (financed) <sup>4</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000
Storage (financed)	-	-	-	-	-	-	-	-	-	6,400,000
Transmission (financed)	-	-	-	-	-	-	-	-	-	5,769,000
Wells (PAYGO) <sup>1,4</sup>	-	-	-	-	-	-	-	-	-	-
Transmission (PAYGO) <sup>1</sup>	-	1,132,800	-	-	691,200	-	768,000	-	1,017,600	11,539,200
Storage (PAYGO)	-	-	-	-	-	-	-	-	-	9,600,000
2005 Bond Issue	-	-	-	3,200,000	-	-	-	3,200,000	-	-
Reserve Fund Capitalization <sup>5</sup>	-	-	-	-	-	-	-	-	-	2,215,000
Cost of Issuance <sup>5</sup>	-	-	-	-	-	-	-	-	-	443,000
Capitalized Interest <sup>5</sup>	-	-	-	-	-	-	-	-	-	2,326,000
Debt Service <sup>5</sup>	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	1,932,000	34,776,000
Existing Debt Service	245,961	245,258	246,274	247,136	247,136	247,136	247,136	247,136	247,136	4,139,401
Annual Expenditures	\$ 2,177,961	\$ 3,310,058	\$ 2,178,274	\$ 5,379,136	\$ 2,870,336	\$ 2,179,136	\$ 2,700,000	\$ 5,132,000	\$ 2,949,600	\$ 82,207,601
Annual Net Cash Flow	\$ 773,039	\$ (348,056)	\$ 795,726	\$ (2,449,136)	\$ (4,336)	\$ 704,864	\$ 208,000	\$ (1,057,500)	\$ (1,269,100)	\$ (19,601)
Ending Fund Balance	\$ 3,406,939	\$ 3,057,881	\$ 3,853,607	\$ 1,402,471	\$ 1,387,135	\$ 2,102,999	\$ 2,313,999	\$ 2,794,107	\$ 4,415,153	\$ (19,601)

<sup>1</sup> "DUE" is dwelling unit equivalents. "PAYGO" is pay-as-you-go.

<sup>2</sup> Cost per DUE = \$1,235

<sup>3</sup> Based on 5.25 percent interest rate applied to average annual fund balance.

<sup>4</sup> Assumes cost of \$1,000,000 per well.

<sup>5</sup> Based on 5.25 percent interest rate on debt, 2.0 percent costs of issuance, 10 percent reserve fund, two years capitalized interest, and 20-year term.

Sources: Tables 1, 2, 4, 5, and 6; City of Stockton; MuniFinancial.

## IMPLEMENTATION

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Construction is expected to begin in 2005. To implement the financing plan the City should:

- ◆ Adopt an ordinance and resolution to implement the new water connection fee;
- ◆ Enable the collection of fees on new building permits following the statutory 60-day period between fee adoption and collection;
- ◆ Identify a financing team, allowing the team at least 90 days to manage the issuance of debt prior to the award of a construction contract;
- ◆ Review the financing plan periodically, and adjust the plan as appropriate in response to changes in absorption rates, bond refinancing, and new projects needed to serve new development; and
- ◆ Adjust the pay-as-you-go portion of the fee annually for inflation based on a project cost index such as the *Engineering News Record* Construction Cost Index. No inflation adjustment for the bonded portion of the connection fee is necessary because bonded project expenditures occur early in the plan and there is little exposure to construction cost inflation. **Table 8** presents the share of the water connection fee that should be increased annually for inflation until all pay-as-you-go projects have been funded.

**Table 8: Water System Connection Fee Inflation**

	Amount	Share
Total Water Connection Fee Per DUE	\$ 1,235	100%
Bonded Projects and Financing (Not Increased For Inflation)	<u>623</u>	<u>50%</u>
Pay-As-You-Go Projects (Increased For Inflation)	\$ 612	50%

Source: Table 5; City of Stockton; MuniFinancial.