# **CCSMD**

# **SEWER RATE STUDY**

Final

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### Prepared for:

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Country Club Sewer Maintenance District

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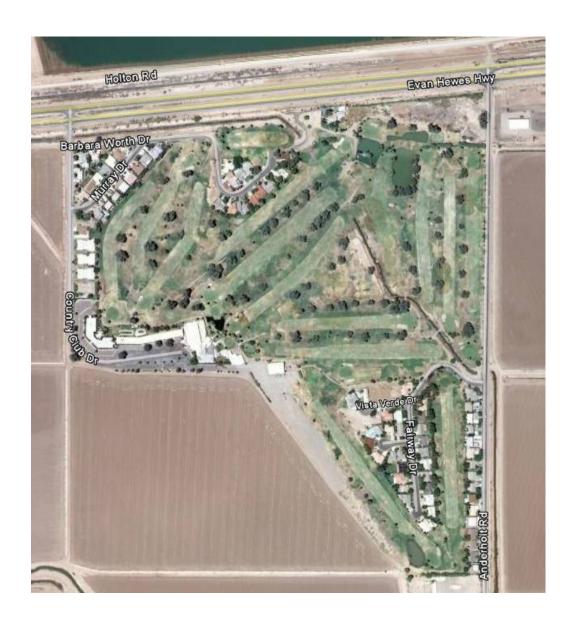


Figure 1 – CCSMD Service Area

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### Introduction/Executive Summary

On June 16, 1970, the Board of Supervisors determined that a Sewer Maintenance District should be formed. The Country Club Sewer Maintenance District (CCSMD) was created to perform the functions authorized under Chapter 4, Part 3, Division 5, of the Health and Safety Code of 1970 to protect public health. Although the County of Imperial oversees it, this Special District is a separate agency. It was created at the request of the property owners to maintain the sewer system for the homes located at the Barbara Worth Country Club. On July 21, 1970 (minute order #7) the Imperial County Board of Supervisors authorized the Department of Public Works to perform the administration of the Country Club Sewer Maintenance District (CCSMD) and to negotiate with the City of Holtville for performance of routine maintenance and operation of the plant.

The City of Holtville assumed the responsibility for the operation and maintenance of the District's sewer system on March 31, 1976, under an agreement between the District and the City of Holtville dated December 19, 1972. This agreement gave the City of Holtville the option to opt out of providing maintenance services by giving six months written notice. The City elected this option by giving written notice in December, 2001. Effective July 1, 2002 the CCSMD was responsible for all maintenance costs associated with the sewer lines and the pump station.

Although expenses are increasing each year, the CCSMD has had no income other than a small amount of County Taxes. This report will discuss the expenses of the CCSMD and alternatives to implement an equitable rate structure to keep the CCSMD from collapse. It appears cooperation between the City of Holtville and the CCSMD would be valuable; both in charging and collecting sewer fees. The CCSMD will not have leverage (i.e. shutting off the water) to enforce payment of the sewer fees without City assistance. One method might be to assess the properties with an annual tax. Regardless, the CCSMD will need some income to continue to serve the residents in the Barbara Worth area. Sewer fees in the CCSMD will probably be higher than the surrounding areas, partly due to the fact that a reserve account for replacement of infrastructure was not put into place at the time that the CCSMD was formed.

This document includes information from several public sources (see references), including the "Country Club Sewer Maintenance District Informational Report", prepared by the County of Imperial, Department of Public Works in June of 2006. This information was placed here for convenience of the reader. The following 11 pages are an excerpt from this report, updated and revised with fiscal year 2008 information:

### History of the CCSMD

On April 16, 1971 David E. Pierson, Director of Imperial County Public Works Department made the first attempt to negotiate with the City of Holtville for maintenance of the sewer system for the CCSMD. At this point the City of Holtville declined the invitation to take over maintenance of the system.

On December 19, 1972 the CCSMD and the City of Holtville entered into an agreement which stipulated that the City of Holtville would operate and maintain the District's sewer system and would establish and collect service charges and maintenance fees to operate the district. This agreement provides the ability for either party to terminate the contract effective at the end of any fiscal year provided that six (6) months prior written notice of such intention is first given. In the event of any such termination, CCSMD shall pay the city a reasonable charge for the right to continue its tie-on with city's sewerage system. If such amount cannot be mutually agreed upon, the charges shall be set through the arbitration process as outlined in paragraph 8 in the 1972 agreement.

On February 15, 1977 the City of Holtville's representatives expressed concern about the 1972 agreement between the city and the CCSMD. The representatives' concern was that the contract could be misconstrued and impose certain duties and obligations on the District to operate and maintain, on the basis or terms set forth therein, sewerage improvements installed on lands which are annexed into the CCSMD in the future; and thereby overburden facilities owned in the city.

The CCSMD was willing to amend the contract as follows:

The city's obligation, under the contract, is to operate and maintain CCSMD's sewage system and to insure the proper functioning thereof and shall pertain only to the sewage system and works constructed within the district's current legal description. City shall not, by reason of the contract, be responsible for the operation and maintenance of sewage facilities constructed in any area which might be annexed to the legal description stipulated in October 3, 1975 agreement. On December 26, 2001 the

Holtville City Council took action to officially notify the County of Imperial and the CCSMD that the City of Holtville was invoking Paragraph 10 of the 1972 agreement between the County, the CCSMD, and the city. Paragraph 10 states the following:

"10. City's agreement to operate and maintain District's sewerage system and to establish and collect service charges and fees may be terminated by either party effective at the end of any fiscal year provided that six (6) months prior written notice of such intention is first given. In the event of any such termination, District shall pay City a reasonable charge for the right to continue the tie-on with City's sewerage system. If the amount of charges cannot be mutually agreed upon, the charges shall be set through the arbitration process as outlined in paragraph 8 above".

In their letter, the Council, City Staff and the City Manager (John A. Jordan), stated their interest in bringing the project to a mutually agreeable resolution. This letter notified the County of Imperial to assume full responsibility for the operation and the maintenance of CCSMD's facilities which included the pump station and sewer forcemain line no later than June 30, 2002.

On December 26, 2001, the Holtville City Council took action to officially notify the County of Imperial (CCSMD) that the City of Holtville is invoking Paragraph 10 of the agreement between the County CCSMD and the city.

In his letter the City Manager (John A. Jordan) informed the county that the city is only obligated to "maintain the sewer line," it is the county's responsibility to provide funds for the replacement, and to accept any liability should the line fail in any way. The City Manager also states that the council and city staff is interested in bringing the project to a mutually agreeable resolution. This letter notified the County of Imperial to assume full responsibility for the operation and the maintenance of the pump station and sewer line no later than June 30, 2002.

# Description of the CCSMD

Sewer service is provided approximately 1.5 miles outside of the city limits to the Barbara Worth Country Club and surrounding residential community. This development is located south of the Alamo River. Wastewater is conveyed from this development to the city's wastewater treatment plant through a dedicated sewer pump station and force main system. The Barbara Worth Pump Station, located off Holton Road, conveys wastewater from the Barbara Worth Country Club and surrounding community.

The Barbara Worth Pump Station is a small package type pump station. Wastewater flows from residential sewers to a 10-inch PVC gravity sewer interceptor that flows underneath State Route 115 and the Holton Interurban Railroad to a sub grade manhole type wet well. Duplex end-suction pumps with automatic controls discharge to a 4-inch PVC force main. The force main parallels the Barbara Worth Canal, crosses under the Rositas Canal and the Alamo River and ultimately connects to the city's 15-inch gravity sewer located in Kamm Road near the city's wastewater treatment plant. The total length of the 4-inch force main is approximately 10,400 feet. The Barbara Worth Pump Station is considerably older than the Sixth Street or Ninth Street Pump Stations, and has experienced operational problems prior to 1998. In addition to maintenance related problems, the system has had difficulty handling high peak flows. This may result from slightly undersized pumping facilities or head losses not accounted for in the long length of force main piping. In 1998 the pump station was considered to be at capacity under current service loads. Due to significant additional flows to the Barbara Worth Pump Station it requires upsizing of the pump station and the force main system. Although the lift station does not have a permanent back-up power supply, the city's trailer-mounted generator is available to operate the lift station during extended power outages.

February 8, 2006 The Holt Group, Inc. prepared a report for the County of Imperial named Barbara Worth Wastewater Forcemain Installation and Sanitary Sewer Pump Station Replacement Report. In this report the Holt Group, Inc. concluded that during the last 10-years the existing wastewater pump station has continued to deteriorate and periodically fail. The maintenance cost, time and effort devoted to keep the pump station in a working condition is significant and far in excess of what is normally required. It is apparent that the Barbara Worth Wastewater Pump Station has exhausted its useful life and should be replaced as soon as possible. The physical P.C.C. wet well structure is deteriorated and at the point of collapse. The wet well structure is no longer salvageable. The electrical panels and pumping units are also aged, outdated, inefficient and in a deteriorated condition. The replacement of the existing 4-inch diameter forcemain with a 10-inch diameter forcemain would allow for the installation of the wastewater pumps at a lower total dynamic head requiring less energy to operate. The pumps would produce a greater flow at less total dynamic head (and pressure) resulting in less maintenance. The electrical costs associated with the wastewater pump station would decrease; even though the flow capability of the pump station would be dramatically increased (from 400- gallons per minute to 750-gallons per minute).

The 10,200 lineal foot wastewater forcemain extending downstream of the Barbara Worth Pump Station has been a source of pipeline ruptures, pipeline clogs, and pump maintenance problems for over 2 decades. The continued rupturing of the 4-inch wastewater forcemain results in health and safety issues in the vicinity of the Imperial Irrigation District Canal Network. It would be prudent for Imperial County to replace the existing undersized 4-inch diameter forcemain with a heavy wall 10-inch diameter AWWA C-900, Class 150 PVC wastewater forcemain as soon as possible. During the Fiscal Year 04/05 the CCSMD experienced several incidents during the audit period concerning the sewer line backing up into homeowners' properties located within the boundaries of the CCSMD. The incidents caused property damage to the homes. Five (5) homeowners filed property damage claims with the Clerk of the Board of the County of Imperial for a total of \$41,907.72. The Imperial County Board of Supervisors approved the claims to be paid from the County's Loss Reserve Liability fund, with the understanding that the CCSMD would repay the fund once sufficient funds became available to the CCSMD as a result of a rate increase or special assessment. This information is based on the Report on Examination Country Club Sewer Maintenance District for the Fiscal Year Ending June 30, 2005 from the Imperial County Auditor Controller.

### Cost of System Improvements

A detailed Engineer's Opinion of Probable Cost was prepared regarding the replacement of the existing 4-inch diameter forcemain with a 10-inch diameter line. It was recommended by the previous Barbara Worth Sanitary Sewer Forcemain Reports, dated June 16, 1998 prepared by Kennedy/Jenks and November 20, 2003, prepared by the Holt Group, Inc., that the wastewater forcemain be constructed in three (3) phases with a total project cost of \$2,274,715.00. The phased installation of the forcemain would allow for the inclusion of the costs relative to a given phase to be placed in an agency's budget for a given fiscal year. The phased improvements would also increase local contractors' participation with regard to the bidding of the project. The installation of segments of the forcemain would eliminate the pipeline ruptures along the length of the wastewater forcemain which was replaced and decrease the pressure exerted by the Barbara Worth Lift Station pumps.

**Phase I** Improvements include an approximate 5,814 – foot section of the wastewater forcemain extending between the Barbara Worth Pump Station and a point immediately south of the Rosita Lateral

and Alamo River. Ruptures and blockages of the wastewater forcemain have been noted to be most prevalent along this section of the pipeline.

**Phase II** improvements recommend that an approximate 4,086 – foot section of the wastewater forcemain be replaced between a point immediately north of the Alamo River and the termination point of the wastewater forcemain at the manhole located along the gravity outfall sewer pipeline at the intersection of Gowling Road and Kamm Road immediately upstream of the Holtville Wastewater Treatment Plant. The installation of the majority of the wastewater forcemain per Phases I and II would drastically reduce the frictional loss along the length of the pipeline and consequently reduce the maintenance associated with the Barbara Worth Pump Station.

Phase III would entail the replacement of the approximately 300-foot pipeline section which presently passes beneath the Alamo River and Rosita Lateral. Due to the length of the jack and bore and anticipated dewatering problems, the cost of the phase III installation is significant. Since the November 20, 2003 Barbara Worth Wastewater Forcemain Installation and Sanitary Sewer Pump Station Replacement Project Report was prepared, no funding sources to replace the forcemain and reconstruct the pump station have been identified. It is recommended a grant or loan be pursued for the replacement of the entire sanitary sewer forcemain and Barbara Worth Pump Station. The phased improvement concept proposed by the 2003 report has not been successful in securing the funding to complete the replacement of the forcemain and pump station. The Engineer's Opinion of Probable Cost for the replacement of the pump station includes:

- Dewatering location of new pump station wet well
- Maintenance of the existing pump station in service while the pump station is being constructed
- Installation of shoring to preserve the integrity of the 30-foot deep excavation and allow safe working conditions
- Construction of new PCC pump station foundation and wet well
- Installation of the pump station above grade P.C.C. slab
- Waterproof the exterior of the wet well below the water table.
- Coat the interior of the wet well with a polyurethane coating system
- Installation of new duplex pumping units, pipelines, elbows, valves, check valves, flow meter and similar items for the installation of the pumping units

- Sandblast and coat piping
- Installation of new electrical service per I.I.D requirements
- Distribution switchboard
- Installation of the emergency power generator set for the Barbara Worth Pump Station
- Installation of 6-foot high chain-link fence around the perimeter of the new pump station
- Installation of 12'0" wide entrance gate
- Preparation of Geotechnical Report and all overhead cost is \$1,277,480.

#### CCSMD Financial Status

The Auditor Controller of Imperial County conducted an audit in accordance with generally accepted auditing standards in conjunction with Section 26909 of the Government Code and included such tests of the accounting records and such other auditing procedures as they considered necessary in the circumstances. The following information regarding the Country Club Sewer District Financial Status was extracted from the most recent audit Imperial County submitted to the Department of Public Works of the revenues, expenditures, and financial position for the years ended June 30, 2008.

#### **IMPERIAL COUNTY ACCOUNTANT COMMENTS**

As noted in the Accountant's Comments, the District is now responsible for all maintenance costs associated with the sewer lines, beginning July 1, 2002. Unless the District immediately initiates measures to increase revenues to fund these maintenance costs and any property damages caused by the sewer line, substantial doubt is raised about its ability to continue as a viable entity. The district has a negative cash balance of (\$63,362) and a negative fund balance of (\$106,048) as of June 30, 2008. Fees to District members by the City of Holtville have been raised per the Rate Study prepared by Nolte Associates in May 2005, as allowed by the Agreement dated December 19, 1972, Section 5.

SUMMARY OF FINDINGS AND RECOMMENDATIONS BY THE IMPERIAL COUNTY AUDITOR CONTROLLERS OFFICE

The Country Club Sewer Maintenance District has had negative working capital since July 2002. During the audit period (FY2008), the district had negative working capital in the amount of \$21,724. The negative working capital was due to maintenance costs in excess of fees collected by the City of Holtville and taxes collected from district members and property damage claims caused by the sewer line backing into District residents' homes. Five claims totaling \$41,907.72 were paid from the County of Imperial Loss Reserve Liability fund, with the understanding that the District would repay the total amount paid for these claims from the fund. Since cash flows have been negative for the past five years and with maintenance charges now the full responsibility of the District, the District will have to provide additional funding to offset these added costs. The June 30, 2008 report submitted by the Auditor Controller recommends that the CCSMD should immediately raise the City of Holtville fees as

recommended and allowed by the agreement between the city and the District. On April 24, 2006 the Public Works Department conducted an analysis of the Country Club Sewer Maintenance District and found that only 1.777886% of the total Property Tax Bill goes towards the sewer maintenance funds.

For example:

If the Net Taxable Value of the Property is \$256,000

The resident pays \$2,560.00 + Voter approved taxes, taxing agency direct charges and special assessment. In this particular example the charges totaled to **\$263.15**.

Hence, \$2,560.00 + \$263.15 = \$2,823.15 this amount is deposited to the Imperial County General Fund.

From the (\$2,823.15 x .01777886 = **\$50.19**) goes towards the sewer maintenance fee. This information was verified and approved by The Imperial County Treasurer/Tax Collectors Office. Imperial County DPW concludes that although the CCSMD residents' Property Tax Bill can be raised and allocated towards the maintenance fees, this amount would not suffice.

## Funding the Pump Station and Forcemain

Imperial County Public Works Department has explored various ways to fund the necessary improvements without having the residents incur the payments. The current engineer's estimate to upgrade the entire sewer system servicing the CCSMD is approximately \$2.4 million dollars. Through extensive research the county has learned that the district does not qualify for any grants to pay for the system upgrade because the median income of the residents within the CCSMD is too high. Therefore the county is researching various low interest loans, available to the CCSMD provided by the United States Department of Agriculture (USDA) from the Federal Government and the State Infrastructure Revolving Fund (SIRF) from State of California. If any of these loan mechanisms are considered, the agencies will be dependent on collateral sufficient to pay back the loan. The collateral could come from the landowners, but that would require a fee levied on each parcel in the CCSMD through the Proposition 218 process. The per parcel assessment would have to be supported by a detailed engineer's report, prepared by a registered professional engineer, certified by the State of California,

that outlines the basis upon which the amount of the proposed assessment was calculated. As with the maintenance and operations fee, it is still inconclusive as to whether there will be a flat fee for every landowner or if it will vary on single-family units, undeveloped parcels, and developed parcels. The following is an investigation done by the Kennedy/Jenks 1998 City of Holtville Sewer Master Plan and the Imperial County Public Works Department.

#### **FINANCING PROGRAMS**

The following discussion addresses funding mechanisms to provide a method to finance the improvements to the system as outlined in the reports prepared by the consulting engineers.

#### **Internal Financing**

Internal financing is a commonly used pay-as-you-go financing method used by many communities to fund capital improvements. The most common forms of internal financing are associated with funding capital projects from the cash proceeds derived from both user charges and capital facility charges (connection fees). Several common methods utilized to support capital project funding are discussed as follows:

#### **User Charges:**

These are charges applied to the utility's customer for use of the service provided by the utility, and generally provide most or all of a utility's revenues. Charges are collected through an established set of rate schedules with the charge schedules based on a combination of the costs of providing service on local policies, related financial inducements for water conservation and other community goals.

#### **Property Taxes:**

County ad valorem (property) taxes are appropriated by many utilities. Taxes are collected from users in proportion to the assessed property value. Although the assessed property value bears little relationship to the cost of providing basic water and wastewater services to a user's property, property-based taxes may be used to fund capital projects wherein a user's property value may be increased by the improvements. However, no California utilities rely heavily on tax funds to cover utility operating and

capital costs, and appropriations are subject to variations by the state government. The statewide trend is presently to fund utility operations through larger proportions of user charges.

#### **Capital Facility Charges:**

These fees, also known as front footage fees, connection fees, line extension fees and contributions in aid of construction, are sources of capital project funds which can be provided by new customers requesting service. These monies cannot be used for operating expenses, and based on applicable state law must be segregated from other fund reserves. Design of appropriate fees and contributions may reflect the cost of providing facilities or may reflect a policy of encouraging service area development. Based on applicable state law, a capital facility fee can compensate the utility for the cost of a new customer's demand on the projected and available system capacity to provide service, but cannot exceed the cost that the new customer places on an existing system. Contributions in aid of construction can be requested from customers or developers causing a large capital investment to be made onpremise or off-premise for their specific benefit. Capital facility fee revenues, like capital project expenditures, are capital asset based and should be treated as changes in asset type rather than utility revenues. As such, these fees are excluded from annual financial reporting revenue and expenditure statements for the same reason that capital expenditures are not shown in the revenue and expenditure statement. However, most utilities prefer to include these revenues in their revenue and expenditure statements.

#### **Capital Reserve Funds and Interest Earnings (Reserve):**

Funds for capital improvements are accumulated from user charges or other income sources and retained in a reserve fund in advance of construction. This method is commonly called pay-as you-go financing, and is supported by budgeting depreciation as a non-cash expense. Capital reserve funding eliminates interest costs incurred for financing and earns interest on funds deposited.

#### **External Financing**

External Financing is a commonly used financing method to fund capital improvements under a pay-as you-use approach is based on the repayment of debt on borrowed capital over the life of the asset. As such, external financing methods employ a pay for it as you use it strategy. The primary benefit of external financing is that projects need not be pre29 funded through a long period of sinking fund-based

cash accumulation. The disadvantages are that there are limited grant monies available for utility projects, low interest loans from government agencies require significant and time consuming documentation, and financially insecure projects have high interest rate assessments by the financial market. Some of the options include:

#### **State Infrastructure Revolving Fund:**

The Infrastructure State Revolving Fund (ISRF) Program provides low-cost financing to public agencies for a wide variety of infrastructure projects. ISRF Program funding is available in amounts ranging from \$250,000 to \$10,000,000, with loan terms of up to 30 years. Interest rates are set on a monthly basis. Preliminary applications are continuously accepted.

Eligible applicants include any subdivision of a local government, including cities, counties, redevelopment agencies, special districts, assessment districts, joint powers authorities and nonprofit corporations formed on behalf of a local government. Eligible project categories include city streets, county highways, state highways, drainage, water supply and flood control, educational facilities, environmental mitigation measures, parks and recreational facilities, port facilities, public transit, sewage collection and treatment, solid waste collection and disposal, water treatment and distribution, defense conversion, public safety facilities, and power and communications facilities.

#### **USDA Loan:**

In the United States Department of Agriculture, Rural Development administers financial and technical assistance programs to help rural communities develop safe and affordable sewage treatment and waste disposal systems. The programs that target wastewater treatment needs are administered by the Water Programs Division of the Rural Utilities Service (RUS). The Water and Waste Disposal Loans and Grants Program provide loans, guaranteed loans, and grants for water, sewer, storm water, and solid waste disposal facilities. Public bodies (e.g., municipalities, counties, Indian tribes, nonprofit organizations) serving rural areas may be eligible for loans or grants from the water and waste disposal program. The program makes assistance available only to rural areas with 10,000 or fewer people. Small communities with wastewater treatment or disposal needs can apply for loans and grants to construct, repair or modify waste collection and waste disposal facilities. To receive loans small communities must show that they:

- 1) Can't get funds at reasonable rates from commercial sources,
- 2) Have the capacity to borrow and repay loans, and pledge security, and
- 3) Can operate and maintain the affected facilities.

Depending on the economic status of the service area, borrowers may receive one of three interest rates: the poverty rate (median household income is below poverty or below 80 percent of the statewide metropolitan median and the project is necessary to meet applicable health or sanitary standards), market rate (where median household income exceeds the statewide non-metropolitan household income), or the intermediate rate.

#### **Proposition 218:**

Limits the authority of local governments to impose taxes and property related assessments, fees, and charges. Requires majority of voters to approve increases in general taxes and reiterates that two-thirds must approve a special tax. Assessments, fees, and charges must be submitted to property owners for approval or rejection, after notice and public hearing. Assessments are limited to the special benefit conferred. Fees and charges are limited to the cost of providing the service and may not be imposed for general governmental services available to the public.

Usage-based sewer rates and the related charges are not incidents of property ownership or fees for a property related service; therefore they are excluded from Proposition 218 under Article XIII D Section 6(c) of the California Constitution. If the rates and charges are imposed as a condition of receiving sewer service from the district (as opposed to being levied solely by virtue of property ownership), then they are not assessments requiring voter approval as defined in Article 13D. As stated by the California Supreme Court: "Taxes, assessments, fees, and charges are subject to the constitutional strictures when they burden landowners as landowners...." The District can raise its rates for maintenance and operation, because it is entitled to recover all of its costs for utility services through user fees.

## City of Holtville Rates

City of Holtville Approved Monthly Sewer Rates									
		Iul-05		Iul-06		Jul-07		Jul-08	Jul-09
							(c	urrent)	
Single Family Residential Units	\$	32.62	\$	37.84	\$	43.89	\$	46.53	\$ 49.32
Multiple Residential Units									
Triplex (per unit)	\$	32.62	\$	37.84	\$	43.89	\$	46.53	\$ 49.32
Fourplex (per unit)	\$	32.62	\$	37.84	\$	43.89	\$	46.53	\$ 49.32
Apartments w/five or more									
units (per unit)	\$	32.62	\$	37.84	\$	43.89	\$	46.53	\$ 49.32
Mobile Home Trailer Park (per									
Space)	\$	32.62	\$	37.84	\$	43.89	\$	46.53	\$ 49.32
			\$	-					
Hotels, Motels, Inns, Rest									
Homes	\$	268.56	\$	311.53	\$	361.37	\$	383.06	\$ 406.04
(over 30 seats)									
Consumption Factor over									
175,000 Gallons per 1,000 gal.	\$	2.61	\$	3.03	\$	3.51	\$	3.72	\$ 3.95

Figure 2 – City of Holtville Approved Sewer Rates

The City of Holtville completed a water and wastewater rate study by Nolte Associates, Inc. in May of 2005. The rates in Figure 1, above, were approved and have been in effect since July 2005. According to the rate study, the sewer rates include fees for treatment and maintenance of the collection system, as well as debt service for the expansion of the wastewater treatment plant. The City charges the sewer rate to each EDU. For example, the City charges three times the sewer fee EDU rate of \$46.53, for a total of \$139.59 per month for a triplex (3 EDU). The Hotel is billed for four connections, each connection billed at \$383.06 per month, plus an additional \$3.72 per 1,000 gallons of water used over 175,000 gallons of water during the month.

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)	/	Holtville Rate / EDU / Month		Holtville ncome / Month
	Anderholt Area						
1	Single Family Homes	38	38	\$	46.53	\$	1,768.14
2	Duplexes	1	2	\$	46.53	\$	93.06
3	Triplexes	4	12	\$	46.53	\$	558.36
	·						
3	Fourplex	1	4	\$	46.53	\$	186.12
	Barbara Worth Drive Area						
4	Single Family Homes	26	26	\$	46.53	\$	1,209.78
5	Duplexes	13	26	\$	46.53	\$	1,209.78
	·						
6	Triplexes	1	3	\$	46.53	\$	139.59
9	Motel Buildings/4 Connections	2	104	\$	383.06	\$	1,532.23
	Totals	86	215			\$	6,697.06

Figure 3 – City of Holtville Current Estimated Monthly Collected Sewer Fees from Country Club Area

Figure 3 illustrates the total number of connections, equivalent dwelling units (EDU), and the estimated income the City of Holtville receives monthly. This will vary depending on the number of active connections. The number of buildings and EDU was field verified on 2/16/09. The City of Holtville reports that there are 83 current active invoices each month. For this study it was assumed that the Hotel does not use more than the allotted amount of water of 175,000 gallons per month, and that every EDU is active during the study period. The Hotel currently pays approximately 23% of the total sewer fees collected.

The City's estimated monthly income from the CCSMD area is \$6,697.06.

<u>Sewer Treatment</u>	Rate Study
Salaries	\$ 134,284.00
Fringe Benefits	\$ 90,715.00
Personal Expenses	\$ 6,606.00
Materials, Supplies and Services	\$ 257,755.00
Total Sewer Treatment Costs	\$ 489,360.00
Sewer Collection Maintenance Costs	
Salaries	\$ 150,365.00
Fringe Benefits	\$ 82,121.00
Personal Expenses	\$ 3,022.00
Materials, Supplies and Services	\$ 75,939.00
Total Sewer Collection Maintenance Costs	\$ 311,447.00
Total Operating Expense	\$ 800,807.00
Debt Service for Treatment Plant Upgrades	\$ 127,290.00
Total Expense to City of Holtville	\$ 928,097.00
Sewer Collection Maintenance Costs as a	
percentage of total expense	33.56%

Figure 4 – City of Holtville Sewer Collection Maintenance Costs as a Percentage of Total Expense per the Wastewater Rate Study dated May 2005

The data within the rate study was reviewed, and it was extrapolated that the fees, including the debt service repayment, from the sewer collection represent 33.56% of the total rate, or \$15.61 of the current \$46.53 (see Figure 4). Although the City collects this fee, the service was not provided by the City of Holtville since July 2002.

Figure 5 shows the total estimated income from the City's sewer fees, since July 2002 when the County took over the maintenance responsibility of the CCSMD. The estimated total sewer fees that will be collected by the City from the CCSMD from July 2002 through July 2009 are \$326,438.40. To calculate

the amount charged by the City for maintenance of the collection system, the total fees were multiplied by 33.56%, which amounts to \$142,152.11. This estimated figure represents the fees collected by the City for maintenance of the CCSMD collection system from July 2002 through July 2009. This service was not provided by the City during this period. The CCSMD is currently \$106,048 in debt since July 2002 per the 2008 Audit Report.

	FY 2002-					
	FY2004	FY 2005	FY 2006	FY 2007	FY2008	Totals
EDU Rate	\$ 28.12	\$ 32.62	\$ 37.84	\$ 43.89	\$ 46.53	
Hotel Rate/ Connection	\$ 231.52	\$ 268.56	\$ 311.53	\$ 361.38	\$ 383.06	
Number of EDU	111	111	111	111	111	
Number of Hotel Connections	4	4	4	4	4	
Total City of Holtville Annual <b>Residential</b> Sewer Fees	\$112,367.52	\$43,449.84	\$50,402.88	\$58,461.48	\$61,977.96	\$326,659.68
Total City of Holtville Annual Residential <b>Hotel</b> Sewer Fees	\$33,338.88	\$12,890.88	\$14,953.44	\$17,346.24	\$18,386.88	\$96,916.32
Total Annual City of Holtville Sewer Fees	\$145,706.40	\$56,340.72	\$65,356.32	\$75,807.72	\$80,364.84	\$423,576.00
33.56% of total fees for Collection System Maintenance	\$48,899.07	\$18,907.95	\$21,933.58	\$25,441.07	\$26,970.44	\$142,152.11

Figure 5 – City of Holtville Estimated Collected Sewer Fees from Country Club Area from July 2002 through July 2009

## Proposed Rates for CCSMD

There are 111 equivalent dwelling units (EDU) within the CCSMD, not including the hotel. The hotel includes two buildings, four existing sewer connections with a total of 104 rooms. The hotel comprises 48% of the total CCSMD. However, all of the rooms are probably not occupied 100% of the time. In this rate study it was estimated that the occupancy rate is 50%. The hotel's share is then approximately 25% of the total costs of operating and maintaining the CCSMD. According to City officials, the hotel is currently paying approximately 23% of the total fee of the CCSMD. Figure 6 illustrates the potential monthly expenses of the CCSMD. These expenses were used to calculate the rates/fees and are further explained in the following pages.

	Debt (2009\$)	Monthly Expense
Amortized Monthly Payment from CCSMD		
to County of Imperial (6% Interest) 10 years	\$ (106,048.00)	(\$1,177.35)
CCSMD O&M Costs (2008)	\$ (23,555.00)	(\$1,962.92)
Estimated CCSMD annual O&M Costs after		
pump station replacement (County forces)	\$ (18,844.00)	(\$1,570.33)
Pipeline, Pump Station and Manhole		
Replacement Fund (Reserve) 75 years@2%	\$(2,400,950.00)	(\$5,173.06)
	Subtotal	(\$8,313.33)
Pump Station and Forcemain Project	\$(2,274,275.00)	(\$10,224.30)
750gpm, 10" force main (Amortized at 4.5%		
low interest loan for 40 years)		
, ,		
Pump Station and Forcemain Project, 400gpm, 8" pipeline (Amortized at 4.5% low interest loan for 40 years)	\$(1,516,000.00)	(\$6,815.37)

Figure 6 – CCSMD Table of Total Estimated Costs

### **Operation and Maintenance**

The costs of operating and maintaining the CCSMD are known or are able to be estimated, and are shown in Figure 6. The cost of operation and maintenance of the CCSMD in FY 2008 was \$23,555 per the FY2008 audit. There has not been any income for the CCSMD except for a small amount of District taxes (minus interest paid) in the amount of \$1,831. The total income was \$3,181. There was a shortfall of \$21,724 in FY2008. The County of Imperial has been covering the costs of running the CCSMD since July 2002.

It is likely that if the existing pump station and forcemain are replaced that the operation and maintenance cost will decrease. It is estimated that if the pump station is replaced, the operation and maintenance costs will be reduced by 20%.

For the existing system, It has been estimated that rates of \$11.50 per month per EDU and \$106.25 per connection of the hotel (4 connections) – additional to the existing tax income – will be required to cover the existing costs of maintenance, although these costs can vary greatly as maintenance costs are volatile due to the unknown number of call-outs.

If the pump station and forcemain are replaced, it is anticipated that the operation and maintenance costs will decrease substantially due to increased efficiency of the new pumps and fewer call-outs and problems. It was estimated that these costs will be cut by 20% if this project is implemented. Therefore, if the pump station and forcemain are replaced it is estimated that the monthly costs per EDU for operation and maintenance the total monthly cost will be \$18,844, or \$8.85 per EDU; the hotel cost will be \$82.00 per connection, with a total of four connections. This is in addition to the existing CCSMD tax income of \$3,181 per year.

The electrical costs were estimated for the new pump station, estimating that the pump station capacity will be 400 gallons per minute, with 70% efficient motors. The Imperial Irrigation District current rate is 7.32 cents per kW/h. This will be increased in April 2009 by 3.89 percent to 7.6 cents per kW/h.

Energy Costs after pump station replacement estimate:							
400gpm pumps energy usage (70%							
efficient) – convert to kW:		21	kW				
Hours of operation:		12	Hr/day				
Total daily usage		252	kW/h				
Cost per kW/h (est. w/ increase)		0.076	kW/h				
Base Rate	\$	4.00	/ month				
Electrical cost per Day	\$	19.16	daily				
Electrical Cost per month	\$	578.92	/ month				

Figure 7 – Estimate of Energy Costs after Pump Station Replacement

## Reserve for existing infrastructure replacement

The CCSMD should set a reserve for replacement of infrastructure. The operation and maintenance is intended to pay for the day-to-day operation, including electricity, replacement of minor parts, personnel costs, etc. It is not intended to pay for large projects such as pipeline or pump station replacement. Figure 7 shows the replacement costs for infrastructure within the CCSMD in 2009 dollars.

In this study it was assumed that the infrastructure has a life expectancy of 75 years. The total lengths of pipelines were estimated based on existing documents and maps. Estimated unit costs for the replacement were assigned to each item. Total infrastructure replacement cost, including the pump station and forcemain (400gpm) is estimated to be \$2,400,950. The monthly reserve required for this is \$5,173.06. The required monthly reserve was estimated calculating the payment with 2% inflation, amortized over 75 years. This reserve is needed even if the pump station is replaced now.

Cost of Replacement	(2009\$)						
Replacement - 75 Years							
	Quantity	Unit	Cost/unit				
8" Gravity Sewer Pipe	7530	LF	\$ 95.00	\$ 715,350.00			
Deep 10" Gravity Sewer Pipe	1330	LF	\$ 120.00	\$ 159,600.00			
Manholes	12	EA	\$ 9,700.00	\$ 10,000.00			
Pump Station (400gpm)	1	LS	\$700,000.00	\$ 700,000.00			
Forcemain (8")	10200	LF	\$ 80.00	\$ 816,000.00			
				\$2,400,950.00			
				(2009\$)			
(\$62,076.76) Yearly Payme	ent (2% inflation)						
(\$5,173.06) Monthly Payı	ment						

Figure 8 –CCSMD Costs to Replace Existing Sewer Collection System Infrastructure (Reserve)

ITEM No.	ITEM Anderholt Area	TOTAL BLDGS	TOTAL UNITS (EDUs)	С	oposed CSMD Rate	Proposed Monthly CCSMD Income
1	Single Family Homes	38	38	\$	11.50	\$ 437.00
	, , ,					
2	Duplexes	1	2	\$	11.50	\$ 23.00
3	Triplexes	4	12	\$	11.50	\$ 138.00
4	Fourplex	1	4	\$	11.50	\$ 46.00
	Barbara Worth Drive Area					
5	Single Family Homes	26	26	\$	11.50	\$ 299.00
6	Duplexes	13	26	\$	11.50	\$ 299.00
7	Triplexes	1	3	\$	11.50	\$ 34.50
				C.	امعمعمار	Ć1 27C FO
				31	ubtotal	\$1,276.50
8	Hotel Buildings/4 Connections	2	104	\$	106.25	\$ 425.00
	Hotel percentage of total fee					25%
	Existing CCMSD tax revenue	(monthl	у)			\$ 265.08
	Totals	86	215			\$1,966.58

Figure 9 –CCSMD Monthly O&M with no pump station and forcemain project

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)		oposed MD Rate	N C	oposed Ionthly CCSMD ncome
1	Anderholt Area	38	38	\$	8.85	\$	336.30
	Single Family Homes		30	7	0.05	<u>, ,                                  </u>	330.30
2	Duplexes	1	2	\$	8.85	\$	17.70
3	Triplexes	4	12	\$	8.85	\$	106.20
4	Fourplex	1	4	\$	8.85	\$	35.40
	Barbara Worth Drive Area						
5	Single Family Homes	26	26	\$	8.85	\$	230.10
6	Duplexes	13	26	\$	8.85	\$	230.10
						_	
7	Triplexes	1	3	\$	8.85	\$	26.55
				Sı	ubtotal	\$	982.35
8	Hotel Buildings/4 Connections	2	104	\$	82.00	\$	328.00
	Hotel percentage of total fee						25%
	Existing CCMSD tax revenue	(monthly	·)			\$	265.08
	Totals	86	215			\$1	,575.43

Figure 10 –CCSMD Monthly O&M with new pump station and forcemain project

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)		Proposed CCSMD Rate		oposed lonthly CCSMD ncome
1	Anderholt Area	20	20	۲	25.00	۲.	1 220 00
1	Single Family Homes	38	38	\$	35.00	\$	1,330.00
2	Duplexes	1	2	\$	35.00	\$	70.00
3	Triplexes	4	12	\$	35.00	\$	420.00
4	Fourplex	1	4	\$	35.00	\$	140.00
	Barbara Worth Drive Area						
5	Single Family Homes	26	26	\$	35.00	\$	910.00
6	Duplexes	13	26	\$	35.00	\$	910.00
7	Triplexes	1	3	\$	35.00	\$	105.00
				S	ubtotal	\$	3,885.00
						r	,
8	Motel Buildings/4 Connections	2	104	\$	325.00	\$	1,300.00
	Hotel percentage of total costs						25%
	Totals	86	215			<b>\$</b> !	5,185.00

Figure 11 –CCSMD Monthly estimate for Reserve Fund

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)	C	oposed CSMD thly Rate	N C	oposed Ionthly CSMD ncome
4	Anderholt Area	20	20	ć	0.00	<u> </u>	204.00
1	Single Family Homes	38	38	\$	8.00	\$	304.00
2	Duplexes	1	2	\$	8.00	\$	16.00
3	Triplexes	4	12	\$	8.00	\$	96.00
4	Fourplex	1	4	\$	8.00	\$	32.00
	Barbara Worth Drive Area						
5	Single Family Homes	26	26	\$	8.00	\$	208.00
6	Duplexes	13	26	\$	8.00	\$	208.00
7	Triplexes	1	3	\$	8.00	\$	24.00
				Sı	ıbtotal	\$	888.00
8	Motel Buildings/4 Connections	2	104	\$	75.00	\$	300.00
	Hotel percentage of total costs						25%
	Totals	86	215			¢1	,188.00

Figure 12 –CCSMD Monthly estimate for IC payback (10 years @ 6%)

# Immediate Pump Station and Forcemain replacement

The existing pump station and forcemain appear to be at the end of their useful life. The cost to replace the existing pump station was estimated by The Holt Group, Inc. in the "BARBARA WORTH WASTEWATER FORCEMAIN INSTALLATION AND SANITARY SEWER PUMP STATION REPLACEMENT REPORT", dated February 2006. The Holt Group recommended replacing the existing pump station with a larger regional pump station with a capacity of 750gpm. The total estimated cost of the project was

\$2,274,275.00. While a larger pump station is desirable, the CSA may choose to replace the existing pump station with the same capacity as existing (400gpm). If a developer wishes to increase the pump station capacity, the costs should be borne by that developer. However, if the 750 gallon per minute pump station is installed by the CCSMD now, the CCSMD can charge capacity fees to future connections. Both scenarios are shown in this report.

The report by Kennedy Jenks completed in 1998 indicated that the pump station current capacity is 400gpm, and recommended an 8-inch diameter forcemain for this size pump station. It is not likely that the existing pump station is actually pumping 400gpm through the existing 4-inch forcemain because of the excessive headloss that would occur at that flow rate through the small forcemain. For purposes of this report, a cost estimate of \$1,516,000.00 was used to complete the 400gpm pump station project. Both projects (400gpm and 750gpm) are shown in the Scenario Matrix (Appendix A). These numbers are high and low estimates; the final project cost will probably fall between the two estimates and will depend on a number of factors - the lowest construction bid, engineering and construction management fees.

The possibility of grant funding for the CCSMD is not likely because the Median Household Income (MHI) is relatively high. The CCSMD would probably require a low interest loan from the funding agency. The monthly cost estimate of the 750gpm option is \$10,224.30, and the monthly cost estimate of the 400gpm option is \$6,815.37. Both payments are estimated using a 4.5% interest rate and 40 year payback period. The 750gpm option will require a \$69/month commitment from the residents per EDU, and \$643/month per connection for the hotel. The 400gpm option will require a \$46/month commitment from the residents per EDU, and \$429/month per connection for the hotel. These are estimates; the final costs will depend on the actual overall project costs.

This type of funding would probably be best suited to be a tax assessment. In this regard, the residents would need to approve the assessment per Proposition 218.

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)	UNITS assessment assessmen		nnual essment	Total monthly assessment income		Total annual assessment income		
	Anderholt Area										
1	Single Family Homes	38	38	\$	46.00	\$	552.00	\$	1,748.00	\$	20,976.00
2	Duplexes	1	2	\$	46.00	\$	552.00	\$	92.00	\$	1,104.00
3	Triplexes	4	12	\$	46.00	\$	552.00	\$	552.00	\$	6,624.00
4	Fournloy	1	4	<u>ر</u>	46.00	\$	552.00	\$	184.00	\$	2 200 00
4	Fourplex		4	\$	46.00	Ş	552.00	Ş	184.00	Ş	2,208.00
	Barbara Worth Drive Area										
5	Single Family Homes	26	26	\$	46.00	\$	552.00	\$	1,196.00	\$	14,352.00
6	Duplexes	13	26	\$	46.00	\$	552.00	\$	1,196.00	\$	14,352.00
7	Triplexes	1	3	\$	46.00	\$	552.00	\$	138.00	\$	1,656.00
								•	Subtotal	\$	61,272.00
8	Hotel Buildings/4	2	104	\$	429.00	\$	198.00	\$	1,716.00	\$	20,592.00
	Connections										250/
	Hotel percentage	of costs									25%
	Totals	86	215					\$	6,822.00	\$	81,864.00

Figure 13 –CCSMD Monthly estimate for USDA loan – 400gpm Pump Station and 8-inch forcemain (40 years @ 4.5%)

ITEM No.	ITEM	TOTAL BLDGS	TOTAL UNITS (EDUs)	m ass	oposed nonthly essment er Unit	ass	uivalent annual essment er EDU	Total monthly assessment income	Total annual assessment income
	Anderholt Area								
1	Single Family Homes	38	38	\$	69.00	\$	828.00	\$ 2,622.00	\$ 31,464.00
2	Duplexes	1	2	\$	69.00	\$	828.00	\$ 138.00	\$ 1,656.00
3	Triplexes	4	12	\$	69.00	\$	828.00	\$ 828.00	\$ 9,936.00
4	Fourplex	1	4	\$	69.00	\$	828.00	\$ 276.00	\$ 3,312.00
	Barbara Worth Drive Area								
5	Single Family Homes	26	26	\$	69.00	\$	828.00	\$ 1,794.00	\$ 21,528.00
6	Duplexes	13	26	\$	69.00	\$	828.00	\$ 1,794.00	\$ 21,528.00
7	Triplexes	1	3	\$	69.00	\$	828.00	\$ 207.00	\$ 2,484.00
								Subtotal	\$ 91,908.00
8	Hotel Buildings/4 Connections	2	104	\$	643.50	\$	297.00	\$ 2,574.00	\$ 30,888.00
	Hotel percentage	of costs							25%
	Totals	86	215					\$ 10,233.00	\$122,796.00

Figure 14 –CCSMD Monthly estimate for USDA loan – 750 gpm Pump Station and 10-inch forcemain (40 years @ 4.5%)

Capacity Fee - 750gpm Pur	mp Station	
Existing EDU	111	
Hotel EDU	104	
Total Existing EDU	215	
Total Existing 250	213	
1 EDU capacity	396	Gallons per Day
Pumping Capacity	750	Gallons per Minute
Pumping Capacity	540000	Gallon per Day (50% operation time)
Total EDU Capacity	1364	EDU
750gpm Pump station		
and 10" forcemain	\$2,274,275.00	
Capacity Fee	\$ 1,667.80	

Figure 15 -CCSMD Capacity Fee Calculation

# Capacity Fee Calculation

The estimate above was calculated using 120 gallons per day per capita sewer generated, and 3.3 capita per EDU. The amount above should be charged to new development to defray the cost of the pump station and forcemain.

## Imperial County Payback

During the Fiscal Year 04/05 the CCSMD experienced several incidents concerning the sewer line backing up into homeowners' properties located within the boundaries of the CCSMD. The incidents caused property damage to the homes.

Five (5) homeowners filed property damage claims with the Clerk of the Board of the County of Imperial for a total of \$41,907.72. The Imperial County Board of Supervisors approved the claims to be paid from the County's Loss Reserve Liability fund, with the understanding that the CCSMD would repay the fund once sufficient funds became available to the CCSMD as a result of a rate increase or special assessment. This information is based on the Report on Examination Country Club Sewer Maintenance District for the Fiscal Year Ending June 30, 2005 from the Imperial County Auditor Controller.

The District currently owes the County of Imperial \$106,048, including the claims paid to date. The County has been funding the CCSMD since July 2002 when the City of Holtville opted out of the maintenance agreement. It has been calculated that to pay the County back over a ten year period, each EDU would pay \$8.00 a month, and the Hotel would pay \$75 per connection – a total of \$300 per month for the Hotel - for ten years, figuring 6% interest compounded monthly. It has been estimated that the City of Holtville has charged approximately \$142,152.11 over the period in question for the maintenance and operation of the CCSDM, but not providing the services.

### **CCSMD Proposed Rates**

Several scenarios are possible, depending on the course determined by the CCSMD, as to what rates/fees will apply. Each scenario will result in a different total cost per EDU and hotel connection. The intention of the matrix is to show the total sewer cost per month per equivalent dwelling unit (EDU) or hotel connection under each scenario. The numbers presented here are estimates based on information available at the time of this report, and are intended to cover the costs of operation only. The following pages show the possible sewer rates to the CCSMD. These can come in the form of assessments or monthly fees, to be determined by the CCSMD. The possible sewer fees/assessments are as follows:

- 1. <u>City of Holtville regular sewer rate</u> This is the rate that the City currently charges for sewer service per EDU. The current rate is \$46.53. The hotel is charged \$383.06 per connection, with a total of four connections, plus a \$3.72 charge per 1,000 gallons of water used over 175,000 gallons total. According to the Wastewater Rate Study, \$107,769 of the total operating revenues of \$1,383,196 is to be transferred into the City's General Fund from the sewer fees. Of the \$46.53 that the City Charges, approximately 33.56% is for sewer collection system operation and maintenance.
- 2. <u>City of Holtville discounted sewer rate</u> This is the rate that the City of Holtville might charge the CCSMD, taking out the sewer collection system operating and maintenance budget line item. The portion that is charged for this is 33.56%, or \$15.61 per month per EDU; therefore the discounted rate is \$30.91 per EDU and \$254.50 per hotel connection. This line item is shown if the City of Holtville charges for treatment of the wastewater only.
- 3. <u>Estimated maintenance costs without pump station and forcemain replacement</u>—The operation and maintenance costs for fiscal year 2008 were \$23,555. This was the amount used in this report; although maintenance costs can vary greatly. This is true especially in this case with an unreliable pump station and forcemain. The calculations

- are based on the expenses from FY 2008. This has been calculated to be \$11.50 per EDU and \$106.25 per connection of the hotel above the existing CCSMD tax income of \$3,181 per year.
- 4. <u>Estimated maintenance costs with new pump station and forcemain replacement</u> It is estimated that if the new pump station and forcemain are installed that the operation and maintenance costs to the CCSMD would be reduced by 20%. The costs are estimated to be \$18,844 annually. This has been calculated to be \$8.85 per EDU and \$82.00 per connection for the hotel above the existing CCSMD tax income of \$3,181 per year.
- 5. Monthly payback to County for debt incurred between July 2002 and July 2008 The CCSMD owes the County of Imperial \$106,048 as of July 2008. In order to pay back this amount the CCSMD will need to pay \$8.00 per EDU and \$75 per connection of the hotel for a period of 10 years. It has been estimated that the City of Holtville will have charged \$142,152.11 through July 2009 for collection system operation and maintenance of the CCSMD area, but has not provided this service.
- 6. Pipeline, pump station and manhole replacement fund (Reserve) In order to have a funds to replace existing infrastructure, the CCSMD should have a reserve account. It was estimated that the infrastructure has a 75 year life expectancy. The total replacement cost of the infrastructure was calculated. The total cost is \$2.4 million in 2009 dollars. Assuming 2% inflation, the monthly payment over 75 years is \$5,173. This is the amount that should be saved in a reserve account. This spread over the existing 111 EDU and 4 Hotel connections is almost the cost of an entire sewer charge. The rate to cover the reserve is \$35 per EDU per month and \$325 per connection of the hotel. The CCSMD may elect to reduce this amount, but a reserve is necessary as can be seen by the lack of funds to replace the existing pump station and forcemain.
- 7. <u>Pump Station and Forcemain Project, 400qpm, 8" pipeline (Amortized at 4.5% low interest loan for 40 years)</u> The low estimate cost of replacing the existing 400gpm pump station with the same pumping capacity is \$1,516,000, which would most likely be

a low interest loan. Should this alternative be selected, the monthly cost per EDU will be \$46.00, and \$429 per connection of the hotel. This would most likely occur as a property assessment rather than a sewer rate. If any development occurs, the developers should be required to pay for any upgrades to the pump station and/or forcemain for the additional capacity, or the connection fee per EDU as shown in Figure 14.

8. Pump Station and Forcemain Project, 750qpm, 10" pipeline (Amoritized at 4.5% low interest loan for 40 years) – The cost of replacing the existing 400gpm pump station with the 750gpm pumping capacity station was estimated at \$2,274,275. This amount would most likely be a low interest loan. If the project cost is as estimated, the cost per EDU will be \$69.00, and \$643.50 per connection of the hotel for loan repayment. This would most likely occur as an annual property assessment rather than a sewer rate. This alternative would provide pumping capacity to the CCSMD above what is required for the existing conditions. If any development occurs, the developers should be required to pay a capacity fee to the CCSMD for the surplus capacity in the pump station and force main, to be used to repay a portion of the loan. The connection fee should be at least \$1,667.80 per EDU as shown in Figure 14.

### **Scenarios**

The total monthly CCSMD sewer rate/fee per EDU or Hotel Connection will depend on a number of circumstances, such as the ability of the City of Holtville to extend a discounted rate (rates without collection system operation and maintenance), the actual project cost and size of the pump station and forcemain, the payback period to Imperial County (estimated 10 years for purposes of this report) and whether or not a reserve fund will be established.

Monthly sewer fees range from \$42.41 to \$167.38 per EDU, depending on the scenario (See Appendix A). The scenario with the lowest short term fees does not equate to the lowest long term fees. The lowest cost per EDU in this report does not include the

replacement of the pump station, Imperial County pay-back or any reserve. The infrastructure will need to be replaced – if not now then in the near future. It has been recommended that the pump station and forcemain be replaced as soon as possible. The pump station will eventually completely fail; it will cost the CCSMD more to replace and maintain it in an emergency than it will to carefully plan, secure funding and engineer the replacement.

Scenario Number 17, shown in the Rate Matrix (Appendix A), includes all of the above with total monthly sewer fees, between the City of Holtville and the CCSMD, estimated at \$128.76 per EDU and \$1,165.50 per connection for the Hotel. This represents \$1,545.12 per EDU per year and \$55,944 per year for the Hotel.

### **Conclusion**

The purpose of this report is to study and show the estimated income required by the CCSMD to continue operations in the future. It has been shown that the existing income from the CCSMD tax is insufficient to keep the CCSMD a going concern. The County of Imperial has been supporting the deficits incurred by the CCSMD; at the end of FY 2008, the CCSMD owed the County \$106,048. It is clear that the CCSMD will need to establish fees or assessments in order to continue without County intervention. If the income is to be sewer fees, it would be of high value to for the CCSMD to establish an agreement with the City of Holtville for collection and deposition of the fees into a designated CCSMD account. The costs per EDU and hotel connection were calculated. There are several possibilities and combinations. The rates/assessments were calculated with the information available at the time of this report. The total monthly cost per EDU and hotel connection is shown in the Rate Matrix in Appendix A.

# Appendix A – Proposed CCSMD Rate Matrix

# Appendix B – Country Club Sewer Maintenance District FY 2008 Audit

Appendix C – City of Holtville Wastewater Rate Study

### References

County of Imperial, Department of Public Works Country Club Sewer Maintenance District Informational Report, June 2006

County of Imperial, Auditor Controller Office, "Country Club Sewer Maintenance District Audit for the Fiscal Year Ended June 30, 2005 Report", June 2005

County of Imperial, Clerk of the Board of Supervisors office, "1972 Agreement between the City of Holtville and CCSMD", December 1972

County of Imperial, Clerk of the Board of Supervisors office, "Amendment to 1972 Agreement Between the City of Holtville and CCSMD", February 1977

The Holt Group, Inc., "Barbara Worth Forcemain Installation and Sanitary Sewer Pump Station Replacement Report", February 2006

Nolte Associates, Inc., "Water and Wastewater Rate Study", May 2005

# Appendix A – Proposed CCSMD Rate Matrix

### APPENDIX A - CCSMD RATE MATRIX

Scenario Number	Rate Description	Quantity	City of Holtville regular rate	Potential City of Holtville discounted rate	Main Costs d pumi	without p station	Estimated Maintenand Costs with pump statio replacemen	ce i	onthly paybacl to County for debt between July 2002 and July 2008	Stat M Repl	ne, Pump Ion and anhole acement Fund	Ford 400g (Ame	np Station and cemain Project, gpm, 8" pipeline oritized at 4.5% interest loan for 40 years)	Pump Station and Forcemain Project, 750 gpm, 10" pipeline (Amoritized at 4.5% low Interest loan for 40 years)	Ra	l monthly ate Per U/Con.	Total City of Holtville Monthly Income	Total Mo	CCSMD onthly come
1	Residential Rate per EDU Hotel Rate per connection	111	\$ 46.53 \$ 383.06		\$ \$	11.50 106.25									\$	58.03 489.31	\$ 5,164.51 \$ 1,532.23		1,276.50 425.00
2	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06		\$ \$	11.50 106.25		\$							\$	66.03 564.31	\$ 5,164.51 \$ 1,532.23		2,164.50 725.00
3	Residential Rate per EDU Hotel Rate per connection	111	\$ 46.53 \$ 383.06		\$ \$	11.50 106.25				\$ \$	35.00 325.00				\$	93.03 814.31	\$ 5,164.5 \$ 1,532.2		
4	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06		\$	11.50 106.25			\$ 8.0 \$ 75.0	00 \$	35.00 325.00				\$	101.03 889.31	\$ 5,164.5 \$ 1,532.2		6,049.50 2,025.00
5	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06					3.85 2.00				\$ \$	45.00 429.00		\$	101.38 894.06	1		6,088.35 2,044.00
6	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06					8.85 2.00		00		\$ \$	46.00 429.00		\$	109.38 969.06	, -		6,976.35 2,344.00
7	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06					8.85 2.00		\$ \$	35.00 <b>32</b> 5.00		46.00 429.00		\$	136.38 1,219.06			9,973.35 3,344.00
8	Residential Rate per EDU Hotel Rate per connection	111 4	\$ 46.53 \$ 383.06					8.85 12.00		.00 \$ .00 \$	35.00 <b>325</b> .00		46.00 429.0		\$	144.38 1,294.06	\$ 5,164.5 \$ 1,532.5		
9	Residential Rate per EDU Hotel Rate per connection	111	\$ 46.53 \$ 383.06					8.85 32.00		.00 \$ .00 \$	35.00 325.00			\$ 69. \$ 643.			\$ \$ 5,164. 5 \$ 1,532.		
10	Residential Rate per EDU Hotel Rate per connection	111 4			0.91 \$ 4.50 \$	11.50 106.25									\$	42.4: 360.7:			1,276.50 425.00
11	Residential Rate per EDU Hotel Rate per connection	111 4			0.91 \$ 4.50 \$	11.50 106.2				3.00 5.00					\$	50.4 435.7	1 \$ 3,431. 5 \$ 1,018.		2,164.50 725.00
12	Residential Rate per EDU Hotel Rate per connection	111			0.91 \$ 4.50 \$	11.5 106.2				\$					\$		1 \$ 3,431 5 \$ 1,018		5,161.50 1,725.00
13	Residential Rate per EDU Hotel Rate per connection	111 4			0.91 \$ 4.50 \$					8.00 \$ 5.00 \$					\$ \$		1 \$ 3,431 5 \$ 1,018		
14	Residential Rate per EDU Hotel Rate per connection	111 4		\$ 3 \$ 25	30.91 54.50		\$ \$	8.85 82.00				\$ \$			\$		6 \$ 3,431		6,088.35 2,044.00
15	Residential Rate per EDU Hotel Rate per connection	111 4		\$ : \$ 2	30.91 54.50		\$ \$	8.85 82.00	\$ \$	8.00 75.00		\$	5 45. 5 429.		\$		76 \$ 3,431 50 \$ 1,018		6,976.35 2,344.00
16	Residential Rate per EDU Hotel Rate per connection	111 4		\$ \$ 2	30.91 5 <b>4.</b> 50		\$ \$	8.85 82.00			•	00 \$			\$		76 \$ 3,431 50 \$ 1,018		
1	7 Residential Rate per EDU Hotel Rate per connection	111			30.91 54.50		\$ \$		5 \$ 0 \$	8.00 75.00		.00 (		.00	5		76 \$ 3,431 50 \$ 1,018		10,861.35 3,644.00
1	8 Residential Rate per EDU Hotel Rate per connection	11: 1 4			30.91 254.50		\$		5 \$ 10 \$	8.00 75.00		.00			9.00		76 \$ 3,43 00 \$ 1,01		

# Appendix B – Country Club Sewer Maintenance District FY 2008 Audit

# AUDITOR'S REPORT COUNTRY CLUB SEWER MAINTENANCE DISTRICT JULY 1, 2007 TO JUNE 30, 2008

Office of Douglas R. Newland, CPA Imperial County Auditor Controller

### AUDITOR'S REPORT COUNTRY CLUB SEWER MAINTENANCE DISTRICT JULY 1, 2007 TO JUNE 30, 2008

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Douglas R. Newland, CPA Auditor-Controller dougnewland@co.imperial.ca.us



County Administration Center 940 Main Streel, Suite 108 El Centro, California 92243 Telephone: 760-482-4535 FAX: 760-482-4557

### AUDITOR-CONTROLLER

September 18, 2008

Board of Supervisors
County of Imperial
And,
Board of Directors,
Country Club Sewer Maintenance District

Subject: Report on the Country Club Sewer Maintenance District

Dear Board Members.

We have audited the comparative balance sheet of the Country Club Sewer Maintenance District as of June 30, 2008 and 2007, and the related comparative statements of revenues, expenditures, and changes in fund balance and changes in financial position for the years then ended. Our audit was made in accordance with generally accepted auditing standards in conjunction with Section 26909 of the Government Code and included such tests of the accounting records and such other auditing procedures, as we considered necessary in the circumstances.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the accompanying statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall statement presentation. We believe that our audit provides a reasonable basis for our opinion.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the normal course of business. As shown in the financial statements for the fiscal year ended June 30, 2008, the District incurred a loss of \$21,724. In the prior fiscal year they also incurred a loss of \$50,350. These factors, including a

deficit in their fund balance of \$106,048 may indicate that the District will be unable to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

In the previous audit we expressed the same concern about the District and recommended that the District immediately initiate measures to increase revenues to fund the maintenance costs. To date the District has not increased the assessment to the property owners, however, on December 11, 2007, the Country Club Sewer Maintenance Board approved a rate study. County funds continue to be used to support the District's ongoing operations without the proper Board of Supervisor action.

In our opinion, the statements referred to above present fairly, in all material respects, the financial position of the Country Club Sewer Maintenance District, for the years ended June 30, 2008 and 2007, in conformity with accounting principles generally accepted in the United States of America.

emland

Respectfully Submitted

Douglas R. Newland, CPA

Auditor-Controller

### **Executive Summary**

### Overview

The Country Club Sewer Maintenance District is a Special District that was established on June 16, 1970, under section 4877 of the Health and Safety Code. This Special District is a separate agency from the County of Imperial. It was created at the request of the property owners to maintain the sewer system for the homes located at the Barbara Worth Country Club. On July 21, 1970 (minute order #7) the Imperial County Board of Supervisors authorized the Department of Public Works to perform the administration of the Country Club Sewer Maintenance District, and to negotiate with the City of Holtville for performance of routine maintenance and operation of the plant.

The City of Holtville assumed the responsibility for the operation and maintenance of the District's sewer system on March 31, 1976, under an agreement between the District and the City of Holtville dated December 19, 1972. This agreement gave the City of Holtville the option to opt out of providing maintenance services by giving six months written notice. The City elected this option by giving written notice in December of 2001. Effective July 1, 2002 the Country Club Sewer Maintenance District was responsible for all maintenance costs associated with the sewer lines.

## Overall Objective

Our purpose was to provide the Board of Supervisors with an independent assessment of the District's ability to continue as a going concern, and to assess the adequacy of internal controls over the District's processes and accounting procedures.

### Overall Conclusion

Based upon the results of our audit, we determined the Country Club Sewer Maintenance District did have proper internal controls over the accounting procedures. However, the Country Club Sewer Maintenance District continues to experience difficulties in meeting its financial obligations. The Country Club Sewer Maintenance District financial difficulties raise substantial doubt as to its ongoing operation.

The District is trying to address these issues by conducting information meetings with the land owners within the Country Club Sewer Maintenance District. In addition, the District's Board has approved a rate study, in order to proceed with increasing fees to support the district's operations.

Details about our audit methodology, results, findings and recommendations are provided in the body of our report.

# Summary of Findings and Recommendations

No new findings for the current fiscal year.

EXHIBIT A

### COUNTRY CLUB SEWER MAINTENANCE DISTRICT COMPARATIVE BALANCE SHEET JUNE 30, 2008 AND 2007

	·	June 30	
ASSETS	2008	2007	Increase (Decrease)
Current: Cash Interest Receivable Total	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0
Long Term: Structures & Improvements	\$223,523	\$223,523	<b></b> \$0_
Total Assets	\$223,523	\$223,523	<u>\$0</u>
LIABILITIES AND FUND EQUITY  Liabilities:			
Deficit Cash Accounts Payable Due to Internal Service Fund Total Liabilities	\$63,362 \$314 <u>\$42,372</u> \$106,048	\$42,108 \$308 \$41,908 \$84,324	\$21,254 \$6 <u>\$464</u> \$21,724
Fund Equity: Investment in Fixed Assets Fund Balance Unrestricted Total Fund Equity	\$223,523 (\$106,048) \$117,475	\$223,523 (\$84,324) \$139,199	\$0 (\$21,724) (\$21,724)
Total Liabilities and Fund Equity	\$223,523	\$223,523	\$0

### COUNTRY CLUB SEWER MAINTENANCE DISTRICT COMPARATIVE STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES FOR THE FISCAL YEARS ENDED JUNE 30, 2008 AND 2007

	Fiscal \	Year Ended	
	June 30 2008	June 30 2007	Increase (Decrease)
REVENUES			
Interest Current Secured Taxes Current Unsecured Taxes Homeowners Prop. Tax Relief Supplemental Assessment	(\$1,350) \$2,795 \$182 \$39 \$165	(\$352) \$2,557 \$183 \$40 \$185	(\$998) \$238 (\$1) (\$1) (\$20)
Total Revenues	\$1,831	\$2,613	(\$782)
EXPENDITURES			
Prof. & Specialized Services Special Departmental Expense Utilities	\$19,290 \$600 \$3,665	\$7,035 \$600 \$3,420	\$12,255 \$0 \$245_
Total Expenditures	<u>\$23,555</u>	\$11,055	\$12,500
Excess of Revenues Over (under) Expenditures	(\$21,724)	(\$8,442)	(\$13,282)
Fund Balance July 1	(\$84,324)	(\$33,974)	(\$50,350)
Adjustment to Fund Balance		(\$41,908) (a)	
Fund Balance June 30	(\$106,048)	(\$84,324)	(\$21,724)

<sup>(</sup>a) Adjustment to fund balance was due to incorrectly setting up the liability to County Liability Loss Reserve.

### COUNTRY CLUB SEWER MAINTENANCE DISTRICT COMPARATIVE STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE FISCAL YEARS ENDED JUNE 30, 2008 AND 2007

	Fiscal Y	ear Ended	
	June 30	June 30	Increase
Sources of Working Capital:	2008	2007	(Decrease)
Sources of Working Capital.			
Interest	(\$1,350)	(\$352)	(\$998)
District Taxes	\$3,181	\$2,965	\$216
Total Sources of Working Capital	\$1,831	\$2,613	/¢782)
Total Sources of Working Capital	Ψ1,001	<u> </u>	(\$782)
tt 5 Mantana Oanka			
Uses of Working Capital:			
Prof. & Specialized Services	\$19,290	\$7,035	\$12,255
Special Departmental Expense	\$600	\$600	\$0
Utilities	\$3,665	\$3,420	\$245_
Total Uses of Working Capital	\$23,555	\$11,055	\$12,500
Net Increase (Decrease) in			
Working Capital	(\$21,724)	(\$8,442)	(\$13,282)
Elements of Increase (Decrease)			
in Working Capital:			
Cash	\$0	(\$7,995)	\$7,995
Interest Receivable	\$0	\$0	\$0
Deficit Cash	(\$21,254)	(\$42,108)	\$20,854
Accounts Payable	(\$6)	(\$247)	\$241
Due To Other Funds	(\$464)	\$0	(\$464)
Adjustment to Fund Balance	\$0	\$41,908_ (a)	(\$41,908)
Total	(\$21,724)	(\$8,442)	(\$13,282)

<sup>(</sup>a) Adjustment to fund balance was due to incorrectly setting up the liability to County Liability Loss Reserve.

### COUNTRY CLUB SEWER MAINTENANCE DISTRICT COMBINED STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES - BUDGET (GAAP BASIS) AND ACTUAL FOR THE FISCAL YEAR ENDED JUNE 30, 2008

Revenues	Budget	Actual	Variance Favorable (Unfavorable)
Interest District Taxes Special Assessments	(\$250) \$2,280 	(\$1,350) \$3,181 \$0	(\$1,100) \$901 \$0
Total Revenues	\$2,030	\$1,831	(\$199)
Expenditures  Prof. & Specialized Services Special Departmental Expense Utilities	\$15,000 \$1,800 \$3,750	\$19,290 \$600 \$3,665	(\$4,290) \$1,200 \$85
Total Expenditures	\$20,550	\$23,555	(\$3,005)
Excess of Revenues Over (Under) Expenditures	(\$18,520)	(\$21,724)	(\$3,204)
Fund Balance July 1		(\$84,324)	
Fund Balance June 30	=	(\$106,048)	

EXHIBIT E

### Country Club Sewer maintenance District Reconciliation of Fund Balance Activities For the Fiscal Years Ended June 30, 2001 through 2008

	2008	2007	2006	2005	Fiscal Year 2004	r Ended 2003	2002	2001	Totals
Fund Balance July 1	_(\$84,324)_	<b>(</b> \$33,974)	(\$53,590)	(\$32,128)	\$13,493	\$29,894	\$34,967	\$35,811	
Sources of Working Capital:									
Interest District Taxes	(\$1,350) \$3,181	(\$352) \$2,965	(\$598) <u>\$2,111</u>	\$170 \$2,043	\$249 \$2,261	\$673 \$2,217	\$1,223 \$2,162	\$2,039 \$2,170	\$2,055 \$19,109_
Total Sources of Working Capital	\$1,831	\$2,613	\$1,513	\$2,213	\$2,510	\$2,890	\$3,385	\$4,209	\$21,164
Uses of Working Capital:									
Prof. & Specialized Services Special Departmental Expense Utilities	\$19,290 \$600 \$3,665	\$7,035 \$600 \$3,420	\$21,772 \$600 \$1,432	\$20,221 \$0 \$3,454	\$3,769 \$41,908 \$2,454	\$19,291	\$8,458	\$5,053	\$104,889 \$43,708 \$14,426
Total Uses of Working Capital	\$23,555	_\$11,055_	\$23,804	\$23,675	\$48,131	\$19,291	\$8,458	\$5,053	\$163,023
Net Increase (Decrease) in Working Capital	(\$21,724)	(\$8,442)	<u>(\$22,292)</u>	(\$21,462)	(\$45,621)	(\$16,401)	(\$5,073)	(\$844)	_(\$141,859)
Fund Balance June 30	(\$106,048)	(\$42,416)	(\$75,882)	(\$53,590)	(\$32,128)	\$13,493	\$29,894	\$34,967	
Adjustment to Fund Balance (1)		(\$41,908)	\$41,908	·					
Adjusted Fund Balance		(\$84,324)	(\$33,974)						

<sup>(1)</sup> On May 8, 2006, an adjustment to the ledger was made to set up a liability due to the County of imperial from the Country Club Sewer Maintenance District for property damage claims that were paid on July 30, 2004 out of the County of imperials Loss Reserve Fund. The journal entry was booked incorrectly, and was subsequently corrected on March 12, 2007.

# Appendix C – City of Holtville Wastewater Rate Study

\$ 13,000,00 to complete

# Holtville, CA

# Water and Wastewater Rate Study



Prepared for City of Holtville





May 2005

Prepared by
Nolte Associates, Inc.



Table 14 Wastewater Impact Fee Calculation

Capital Improvement	Estimated Cost \$2005	% Expansion	% Replacement	Cost of Expansion	Estimated Additional EDUs Served	Cost per EDU
Sawer Line Maintenance	\$1,000,000	50%	50%	\$500,000	1200	\$417
Wastewater Plant Improvements	\$7,750,000	80%	20%	\$6,200,000	2000	\$3,100
Outral Replacement	\$3,690,000	75%	25%	\$2,767,500	7500	\$369
Purchase 20 Acres Adjacent to Plant	\$250,000	91.1%	1(1%	\$225,000	2000	\$113
Ropleco Pump Station (Zenos)	\$350,000	5%	95%	\$17,500	2000	\$9
Total	\$13,040,000		195256	\$9,710,000	own and the	\$4,007

Excess Capacity	Galons of Excess Capacity	Avarage Flay Demand per EDJ (gal)	Number of FEUs with Existing Excess Capacity	Present Day Cost per Gallon of Treatment Plant Capacity	Cost PerEDJ
Wastewater Treatment Facility	110,000	400	275	\$2.50	\$1,000
Total Impact Fee per FDU (FY2006)					\$5,007

Accumed 1 EDU = 400 gpd of ADF wastowator gonoration EDU is for Single Family Homes. Costs for other developments are prorated based on same percentage difference as existing impact Food

### DISCLOSURE STATEMENT

Numerous assumptions were made to project revenue, expenses, and debt for the Wastewater Enterprise and Capacity Funds over the length of the study period for this rate study. These assumptions were based off of several documents and sources, including but not limited to those listed at the beginning of this study, the assumptions listed at the beginning of this document, guidelines and assumptions from the City, and the City's projected fund budgets from FY2005 through FY2010.

Several factors may influence the projected revenue, expense, and debt of the City's Wastewater Enterprise Fund. These include, but are not limited to the interest rate on bond issuances; the actual number, type, and schedule of additional accounts during the study period; unforeseen regulatory and water quality requirements; abnormal weather that affects water consumption; projected expenses, such as utility, permitting, and raw water costs; unforeseen needs for repair to infrastructure; and reaction by existing customer base to rises in water usage by consuming less water. Nolte cannot be held liable for the accuracy of the financial projections presented in this report.



### **APPENDIX**

Projected Enterprise Sewer Charges Through FY2010



			evenue		
Comme	ercial C	С			
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Projected Annual Revenue
2004 2005	55 55	0	\$28.12 \$28.12	\$1,547 \$1,547	\$ 18,559 \$ 18,559
2006	55	0	\$32.62	\$1,794	\$ 21,529
2007 2008	55 55	0	\$37.84 \$43.89	\$2,081 \$2,414	\$ 28,969
2009 2010	55 55	0 0	\$46.53 \$49.32	\$2,559 \$2,712	\$ 30,707 \$ 32,550
Reside	ential (II	R/OR)			
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Projected Annual Revenue
2004 2005 2006	998 998 998	0 0 0	\$28.12 \$28.12 \$32.62	\$28,064 \$28,064 \$32,554	\$ 336,765 \$ 336,765 \$ 390,648
2007 2008	998 998	0 0	\$37.84 \$43.89	\$37,763 \$43,805	\$ 453,151 \$ 525,655
2009 2010	998 1198	200 200	\$46.53 \$49.32	\$51,085 \$64,014	\$ 613,026 \$ 768,169
Duple	x WA				
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Projected Annual Revenue
2004 2005		. 0	\$56.24	\$2,981	\$ 35,769
2005		0	\$56.24 \$65.24	\$2,981 \$3,458	\$ 35,769 \$ 41,492
2007	53	0	\$75.68	\$4,011	\$ 48,130
2008		0	\$87.78	\$4,653	\$ 55,831
2009 2010		0	\$93.05 \$98.63	\$4,932 \$5,228	\$ 59,181 \$ 62,732

			levenue			
Four Fa	amily S	8				- 1
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Α	ojected nnual evenue
2004 2005	12 12	0	\$112.48 \$112.48	\$1,350 \$1,350	\$ \$	16,197 16,197
2006 2007 2008	12 12 12	0 0 0	\$130.48 \$151.35 \$175.57	\$1,566 \$1,816 \$2,107	\$ \$ \$	18,789 21,795 25,282
2009	12 12	0	\$186.10 \$197.27	\$2,233 \$2,367	\$ \$	26,799 28,407
Triplex	< R3,R6					
	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	,	rojected Annual evenue
2004 2005 2006	18	0 0 0	\$84.36 \$84.36 \$97.86	\$1,518 \$1,518 \$1,761	\$ \$	18,222 18,222 21,137
2007 2008	18	0 0	\$113.51 \$131.68	\$2,043 \$2,370	\$ \$	24,519 28,442
2009 2010		0 0	\$139.58 \$147.95	\$2,512 \$2,663	\$ \$	30,149 31,958
	milies					0.,000
	Accts	New	•	Fixed Rate Monthly Revenue		rojected Annual Revenue
2004		0	\$1,181.04		\$	28,345
200		0	\$1,181.04		\$	28,345
200 200		0	\$1,370.01		\$	32,880
200		0	\$1,589.21 \$1,843.48		\$ \$	38,141 44,244
200		0	\$1,954.09		э \$	46,898
201	0 2	0	\$2,071.30		\$	49,712

	ed User	Rate F	Revenue		·		
C3							
				Fixed		Pro	jected
Year	Accts	New	Monthly	Rate		Αı	nnual
1		Accts	Fixed Rate	Monthly		Re	venue
1,0004		_	<b>***</b>	Revenue		•	2,213
2004	1	0	\$184.41	\$184		\$	
2005	1-	0	\$184.41	\$184	· ·	\$ .	2,213
2006	1	0	\$213.92	\$214		\$	2,567
2007	1	0	\$248.14	\$248		\$	2,978
2008	1	0	\$287.84	\$288		\$	3,454
2009	1	0	\$305.12	\$305		\$	3,661
2010	. 1	0	\$323,42	\$323		\$	3,881
30 Far	nilies S	3					
				Fixed		Pr	ojected
Year	Accts	New	Monthly	Rate			Annual
1,000	710013	Accts	Fixed Rate	Monthly			evenue
1				Revenue			
2004	2	0	\$843.60	\$1,687		\$	20,246
2005	2	0	\$843.60	\$1,687		\$	20,246
2006	2	0	\$978.58	\$1,957		\$	23,486
2007	2	0	\$1,135.15	\$2,270		\$	27,244
2008		0	\$1,316.77	\$2,634		\$	31,603
2009		0	\$1,395.78	\$2,792		\$	33,499
2010	2	0	\$1,479.52	\$2,959		\$	35,509
EB							
1				Fixed		D	rojected
Voar	Accts	New	Monthly	Rate			Annual
1 ear	Accis	' Accts	Fixed Rate	e Monthly			
1				Revenue		r	Revenue
2004		0	\$281.20	\$281		\$	3,374
2005		0	\$281.20	\$281		\$	3,374
2006	5 1	0	\$326.19	\$326		\$	3,914
2007	1	0	\$378.38	\$378		\$	4,541
2008		0	\$438.92	\$439		\$	5,267
2009		0	\$465.26	\$465		- ¢	5,583
2010		0	\$493.17	\$493		\$ \$	5,918
			Ψ 100.11	Ψτυψ		φ	9,510

2005   1	Projecte		Hale H	evenue				
Year         Accts         New Accts         Monthly Fixed Rate Rate (Armula)         Annual Revenue           2004         1         0         \$ 168.72         \$ 169         \$ 2,025           2006         1         0         \$ 158.72         \$ 169         \$ 2,025           2006         1         0         \$ 195.72         \$ 196         \$ 2,025           2007         1         0         \$ 227.03         \$ 227         \$ 2,349           2008         1         0         \$ 227.03         \$ 227         \$ 3,350           2009         1         0         \$ 225.95         \$ 3,350           2010         1         0         \$ 225.90         \$ 3,350           Families S5         Fixed Rate Monthly Rate         Rate         Projected Annual Revenue           2004         1         0         \$ 140.60         \$ 141         \$ 1,687           2005         1         0         \$ 140.60         \$ 141         \$ 1,687           2006         1         0         \$ 140.60         \$ 141         \$ 1,687           2007         1         0         \$ 140.60         \$ 141         \$ 2,275           2007         1         0	6 UNITS	S R7						
2004   1	Year /	Accts		Fixed Rate	Rate Monthly		Ar	nnual
Year         Accts         New Acts         Monthly Fixed Rate Fixed Rate         Fixed Annual Revenue           2004         1         0         \$140.60         \$141         \$ 1,687           2005         1         0         \$140.60         \$141         \$ 1,687           2006         1         0         \$163.10         \$163         \$ 1,687           2007         1         0         \$163.10         \$163         \$ 2,270           2008         1         0         \$219.46         \$219         \$ 2,270           2008         1         0         \$232.63         \$233         \$ 2,792           2010         1         0         \$246.59         \$247         \$ 2,953           Transities ST         Fixed Rate Monthly Accts         Revenue         Projected Annual Revenue           2004         2         0         \$309.32         \$619         \$ 7,42           2005         2         0         \$309.32         \$619         \$ 7,42           2006         2         0         \$309.32         \$619         \$ 7,42           2006         2         0         \$358.81         \$718         \$ 8,61           2007 <td>2005 2006 2007 2008 2009 2010</td> <td>1 1 1 1</td> <td>0 0 0</td> <td>\$168.72 \$168.72 \$195.72 \$227.03 \$263.35 \$279.16</td> <td>\$169 \$169 \$196 \$227 \$263 \$279</td> <td>. , .</td> <td>\$ \$ \$ \$</td> <td>2,025 2,349 2,724 3,160 3,350</td>	2005 2006 2007 2008 2009 2010	1 1 1 1	0 0 0	\$168.72 \$168.72 \$195.72 \$227.03 \$263.35 \$279.16	\$169 \$169 \$196 \$227 \$263 \$279	. , .	\$ \$ \$ \$	2,025 2,349 2,724 3,160 3,350
Year         Accts         New Accts         Monthly Fixed Rate         Rate Monthly Revenue         Frojected Annual Revenue           2004         1         0         \$140.60         \$141         \$1,687           2005         1         0         \$140.60         \$141         \$1,687           2006         1         0         \$163.10         \$163         \$1,957           2007         1         0         \$189.19         \$189         \$2,277           2008         1         0         \$219.46         \$219         \$2,277           2009         1         0         \$232.63         \$233         \$2,792           2010         1         0         \$246.59         \$247         \$2,958           Year Accts         New Monthly Accts         Fixed Rate Monthly Revenue         Rate Annual Revenue         Annual Revenue         Annual Revenue           2004         2         0         \$309.32         \$619         \$7,42           2005         2         0         \$309.32         \$619         \$7,42           2005         2         0         \$309.32         \$619         \$9.86           2007         2         0         \$416.22	5 Fami	ilies S5	5					
2005   1	Year	Accts			Rate Monthly		А	nnual
2005   1	2004	1	0	\$140.60			\$	1,687
2007   1   0   \$189.19   \$189   \$ 2,270	2005	1	0	\$140.60	\$141			1,687
2008   1   0   \$219.46   \$219   \$   2,634     2009   1   0   \$232.63   \$233   \$   2,792     2010   1   0   \$246.59   \$247   \$   \$2,955     The families S7	2006	1	0	\$163.10				1,957
2009   1   0   \$232.63   \$233   \$2,792   \$2010   1   0   \$246.59   \$247   \$2,955   \$2,955   \$247   \$2,955   \$		1						2,270
2010   1   0   \$246.59   \$247   \$2,956     The milies S7		.1						2,634
Transilies S7								
Fixed New Accts       Fixed Rate       Projected Annual Revenue         2004 2 0 \$309.32 \$619       \$ 7,424         2005 2 0 \$309.32 \$619       \$ 7,424         2006 2 0 \$358.81 \$718       \$ 8,61         2007 2 0 \$416.22 \$832       \$ 9,98         2008 2 0 \$482.82 \$966       \$ 11,58         2009 2 0 \$511.79 \$1,024       \$ 12,28	2010	1	0	\$246.59	\$247		\$	2,959
Year Acets         New Acets         Monthly Fixed Rate Acets         Projected Annual Revenue           2004         2         0         \$309.32         \$619         \$7,424           2005         2         0         \$309.32         \$619         \$7,424           2006         2         0         \$358.81         \$718         \$8,61           2007         2         0         \$416.22         \$832         \$9,98           2008         2         0         \$482.82         \$966         \$11,58           2009         2         0         \$511.79         \$1,024         \$12,28	11 Fa	milies :	S7					
2004       2       0       \$309.32       \$619       \$ 7,424         2005       2       0       \$309.32       \$619       \$ 7,424         2006       2       0       \$358.81       \$718       \$ 8,61         2007       2       0       \$416.22       \$832       \$ 9,98         2008       2       0       \$482.82       \$966       \$ 11,58         2009       2       0       \$511.79       \$1,024       \$ 12,28	Year	Accts	•		Rate Monthly		1	Annual
2005       2       0       \$309.32       \$619       \$ 7,424         2006       2       0       \$358.81       \$718       \$ 8,61         2007       2       0       \$416.22       \$832       \$ 9,98         2008       2       0       \$482.82       \$966       \$ 11,58         2009       2       0       \$511.79       \$1,024       \$ 12,28	2004	. 2	0	\$309.32			\$	7,424
2006       2       0       \$358.81       \$718       \$8,61         2007       2       0       \$416.22       \$832       \$9,98         2008       2       0       \$482.82       \$966       \$11,58         2009       2       0       \$511.79       \$1,024       \$12,28								7,424
2007       2       0       \$416.22       \$832       \$ 9,98         2008       2       0       \$482.82       \$966       \$ 11,58         2009       2       0       \$511.79       \$1,024       \$ 12,28	2006				· ·			8,611
2008 2 0 \$482.82 \$966 \$ 11,58 2009 2 0 \$511.79 \$1,024 \$ 12,28								9,989
2009 2 0 \$511.79 \$1,024 \$ 12,28							\$	11,588
							\$	12,283
	2010	2			\$1,085		\$	13,020

	ed User	Rate F	Revenue				
14				Fixed			
Year	Accts	New Accts	Monthly Fixed Rate	Rate Monthly Revenue			Projected Annual Revenue
2004	2	0	\$184.41	\$369		\$	4,426
2005	2	0	\$184.41	\$369		\$	4,426
2006	2	0	\$213.92	\$428		\$	5,134
2007	2	0	\$248.14	\$496		\$	5,955
2008	2	0	\$287.84	\$576		\$	6,908
2009	2	0	\$305.12	\$610		\$	7,323
2010	2	0	\$323.42	\$647		\$	7,762
20 Un	its S6						
1				Fixed			Projected
Voor	Accts	New	Monthly	Rate			Annual
1 ear	Accis	Accts	Fixed Rate	Monthly			Revenue
1				Revenue			nevenue
2004	2	0	\$562.40	\$1,125		\$	13,498
2005		0	\$562.40	\$1,125		\$	13,498
2006	2	0	\$652.38	\$1,305		\$	15,657
2007	2	0	\$756.77	\$1,514		\$	
2008	2	0	\$877.85	\$1,756		\$	
2009	2	0	\$930.52	\$1,861			
2010	2	0	\$986.35	\$1,973		9	23,672
130 F	amilies	S4					
1				Fixed			Projected
Year	Accts	New	,	Rate			Annual
1 '04'	710010	Accts	s Fixed Rate	•			Revenue
1				Revenue			
2004		0	\$3,655.60	•			\$ 43,867
200		0	\$3,655.60				\$ 43,867
2000		0	\$4,240.50				\$ 50,886
200		0	\$4,918.98				\$ 59,028
200		0	\$5,706.01	•	4		\$ 68,472
200		0	\$6,048.37				\$ 72,580 \$ 76,935
201	0 1	0	\$6,411.27	7 \$6,411			\$ 76,935

				levenue										
Flat	Sew	er GF												- 1
Yea	ur A	octs	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue				3				Ar	iected inual venue
200		1	0	\$25.67	\$26								\$	308
200	)5	1	0	\$25.67	\$26								\$	308
200	)6	1 .	0	\$29.78	\$30								\$	357
200	07	1	0	\$34.54	\$35								\$	414
200	- 8C	1	0	\$40.07	\$40								\$	481
200		1	0	\$42.47	\$42								\$	510
20	10	1	0	\$45.02	\$45								.\$	540
$\Box$	13													
Ye	ar	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	Α	ojected nnual evenue
			_	0.01.11	Revenue	<b>500</b>	-	` ′					Φ.	0.504
	004	. 4	0	\$184.41	\$738	500	0	0	33	40	\$2.25	\$713 \$710	\$	9,564
	005	4	0	\$184.41	\$738	500	0	0	33	40	\$2.25	\$713	\$	9,564
	006	4	0	\$213.92	\$856	500	0	0	33	40	\$2.61	\$827	\$	11,095
	007	4	0	\$248.14	\$993	500	0	0	33	40	\$3.03	\$959	\$	12,870
	800	4	0	\$287.84	\$1,151	500	0	0	33	40	\$3.51	\$1,113	\$	14,929
	900	4	0	\$305.12	\$1,220	500	0	0	33"	40	\$3.72	\$1,179	\$	15,825
	010	4	0	\$323.42	\$1,294	500	0	0	33	40	\$3.95	\$1,250	\$	16,774
C9	)													
Y.	ear	Accts	New Acct	•	Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	,	rojected Annual evenue
2	004	1	0	\$136.67	\$137	60	100	36	100	62	\$2.25	\$1,323	\$	2,963
2	005	1	0	\$136.67	\$137	60	100	36	100	62	\$2.25	\$1,323	\$	2,963
2	006	1	0	\$158.54	\$159	60	100	36	100	62	\$2.61	\$1,535	\$	3,437
	007	1	0	\$183.90	\$184	60	100	36	100	62	\$3.03	\$1,780	\$	3,987
	2008	1	0	\$213.33	\$213	60	100	36	100	62	\$3.51	\$2,065	\$	4,625
	2009	1	0	\$226.13	\$226	60	100	36	100	62	\$3.72	\$2,189	\$	4,902
	2010	1	0	\$239.69	\$240	60	100	36	100	62	\$3.95	\$2,320	\$	5,197

Project	ed User	Hate H	Revenue										
C7													
Year	Accts	New Accts	Monthly Fixed Rate		` '	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	An	ected inual renue
2004	2	0	\$231.52	\$463	175	50	625	50	591	\$2.25	\$16,416	\$	21,972
2005	2	0	\$231.52	\$463	175	50	625	50	591	\$2.25	\$16,416	\$	21,972
2006	2	Ō	\$268.56	\$537	175	50	625	50	591	\$2.61	\$19,043	\$	25,488
2007	2	0	\$311.53	\$623	175	50	625	50	591	\$3.03	\$22,089	\$	29,566
2008	2	0	\$361.38	\$723	175	50	625	50	591	\$3.51	\$25,624	\$	34,297
2009	2	0	\$383.06	\$766	175	50	625	50	591	\$3.72	\$27,161	\$	36,355
2010	2	0	\$406.05	\$812	175	50	625	50	591	\$3.95	\$28,791	\$	38,536
Comn	nercial (	31											
	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	Α	ojected nnual evenue
2004	38	0	\$25.67	\$975	10	18	30	33	31	\$2.25	\$8,018	\$	19,724
2005	38	0	\$25.67	\$975	10	18	30	33	31	\$2.25	\$8,018	\$	19,724
2006	38	0	\$29.78	\$1,132	10	18	30	33	31	\$2.61	\$9,301	\$	22,880
2007	38	0	\$34.54	\$1,313	10	18	30	33	31	\$3.03	\$10,789	\$	26,540
2008		0	\$40.07	\$1,523	10	18	30	33	31	\$3.51	\$12,516	\$	30,787
2009	38	0	\$42.47	\$1,614	10	18	30	33	.31	\$3,72	\$13,266	\$	32,634
2010	38	0	\$45.02	\$1,711	10	18	30	33	31	\$3.95	\$14,062	\$	34,592
Com	nercial	C2											
Year	Accts	New		Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000	Accounts Over Threshold ) Summer, %	Avg. Mo. Gal Over Threshold Summer (000	Gal. Over	Nevenue	,	rojected Annual Ievenue
2004		0	\$25.67	\$334	25	29	16	38	24	\$2.25	\$2,415	\$	6,419
200		0	\$25.67	\$334	25	29	16	38	24	\$2.25	\$2,415	\$	6,419
200		0	\$29.78	\$387	25	29	16	38	24	\$2.61	\$2,801	\$	7,447
200		0	\$34.54	\$449	25	29	16	38	24	\$3.03	\$3,249	\$	8,638
200		0	\$40.07	\$521	25	29	16	38	24	\$3.51	\$3,769	\$	10,020
200		0	\$42.47	\$552	25	29	16	38	24	\$3.72	\$3,996	\$	10,621
201	0 13	0	\$45.02	\$585	25	29	16	38	24	\$3.95	\$4,235	\$	11,258

	u 0001	, , ,	evenue										
12													
Year	Accts	New Accts	Monthly Fixed Rate		Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	A	pjected nnual evenue
2004	3	0	\$184.41	\$553	150	33	41	0	0	\$2.25	\$548	\$	7,187
2005	3	Ö	\$184.41	\$553	150	33	41	0	0	\$2.25	\$548	\$	7,187
2006	3	0	\$213.92	\$642	150	33	41	0	0	\$2.61	\$636	\$	8,337
2007	3	0	\$248.14	\$744	150	33	41	0	0	\$3.03	\$737	\$	9,670
2008	- 3	Ö	\$287.84	\$864	150	33	41	0	0	\$3.51	\$855	\$	11,218
2009	3	0	\$305.12	\$915	150	33	41	0	0	\$3.72	\$907	\$	11,891
2010	3	0	\$323.42	\$970	150	33	41	Ō	0	\$3.95	\$961	\$	12,604
_													
C6 Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)		Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	A	ojected Annual evenue
2004	2	0	\$122.52	\$245	50	0	0	50	36	\$2.25	\$486	\$	3,426
2005	2	0	\$122.52	\$245	50	Ó	0	50	36	\$2.25	\$486	\$	3,426
2006	2	0	\$142.12	\$284	50	0	0	50	36	\$2.61	\$564	\$	3,975
2007	2	0	\$164.86	\$330	50	0	0	50	36	\$3.03	\$654	\$	4,611
2008	2	0	\$191.24	\$382	50	0	0	50	36	\$3.51	\$759	\$	5,348
2009	2	0	\$202.72	\$405	50	0	0	50	36	\$3.72	\$804	\$	5,669
2010	2	0	\$214.88	\$430	50	0	. 0 .	50	36	\$3.95	\$852	\$	6,009
Resta	urant C	5											
	Accts	New	,	Fixed Rate Monthly Revenue	Threshold (000 Gal.)			Accounts Over Threshold ) Summer, %	Avg. Mo. Gal. Over Threshold Summer (000	Gal. Over	Annual Revenue Over Threshold	,	rojected Annual Ievenue
2004	1	0	\$75.09	\$75	30	0	0	0	0	\$2.25	\$0	\$	901
2005	5 1	0	\$75.09	\$75	30	0	0	0	0	\$2.25	\$0	\$	901
2006	5 1	0	\$87.10	\$87	30	0	0	0	0	\$2.61	\$0	\$	1,045
2007		0	\$101.04	\$101	30	0	0	0	0	\$3.03	\$0	\$	1,212
2008		0	\$117.21	\$117	30	0	0	0	0	\$3.51	\$0	\$	1,406
200		0	\$124.24	\$124	30	0	0	0	0	\$3.72	\$0	\$	1,491
				,							<del>-</del> -	*	.,

	rojected User Rate Revenue												
2010	1	0	\$131.69	\$132	30	0	. 0	0	0	\$3.95	\$0	\$	1,580
C4													
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	Δ	ojected Innual evenue
2004	11	0	\$37.02	\$407	15	27	132	27	115	\$2.25	\$9,903	\$	14,790
2005	11	0	\$37.02	\$407	15	27	132	27	115	\$2.25	\$9,903	\$	14,790
2006	11	0	\$42.94	\$472	15	27	132	27 -	115	\$2.61	\$11,488	\$	17,157
2007	11	0	\$49.81	\$548	15	27	132	27	115	\$3.03	\$13,326	\$	19,902
2008	11	0	\$57.78	\$636	15	27	132	27	115	\$3.51	\$15,458	\$	23,086
2009	11	0	\$61.25	\$674	15	27	132	27	115	\$3.72	\$16,386	\$	24,471
2010	11	0	\$64.93	\$714	15	27	132	27	115	\$3.95	\$17,369	\$	25,939
C8													
Year	Accts	New Accts	Monthly Fixed Rate	Fixed Rate Monthly Revenue	Threshold (000 Gal.)	Accounts Over Threshold Winter, %	Avg. Mo. Gal. Over Threshold Winter (000)	Accounts Over Threshold Summer, %	Avg. Mo. Gal. Over Threshold Summer (000)	Rate/1,000 Gal. Over Threshold	Annual Revenue Over Threshold	_	rojected Annual Ievenue
2004	5	0	\$37.02	\$185	30	20	6	60	19	\$2.25	\$851	\$	3,072
2005	5	. 0	\$37.02	\$185	30	- 20	, 6	60	19	\$2.25	\$851	\$	3,072
2006	5	0	\$42.94	\$215	30	20	6	60	19	\$2.61	\$987	\$	3,563
2007	5	0	\$49.81	\$249	30	20	6	60	19	\$3.03	\$1,144	\$	4,133
2008	5	0	\$57.78	\$289	30	20	6	60	19	\$3.51	\$1,328	\$	4,795
2009	5	0	\$61.25	\$306	30	20	6	60	19	\$3.72	\$1,407	\$	5,082
2010	5	0	\$64.93	\$325	30	20	6	60	- 19	\$3.95	\$1,492	\$	5,387

City of Holtville Wastewater Rate Study Projected User Rate Revenue

### PROJECTED TOTAL ANNUAL SYSTEM REVENUE

FY	Projected Annual Revenue
2004	\$642,944
2005	\$642,944
2006	\$745,815
2007	\$865,145
-2008	\$1,003,569
2009	\$1,119,614
2010	\$1,305,153

### Methodology for this spreadsheet

The total number of accounts was added up and then separated into their respective rate codes. Each rate code has its own charge rate. Some rate codes are only charged a set amount no matter what water useage they had. Other rate codes were charged an additional fee for each additional 1,000 gallons that they went over a threshold. Out of the total accounts per each rate code, accounts that went over were noted and the percentage of accounts over was calculated to be used in future revenue projections. The monthly revenue was calculated by adding the accounts with their standard charge rates and the accounts with their threshold charge rates. The monthly revenue was then multiplied by 6 to get a bi-annual amount since the

#### References

County of Imperial, Department of Public Works Country Club Sewer Maintenance District Informational Report, June 2006

County of Imperial, Auditor Controller Office, "Country Club Sewer Maintenance District Audit for the Fiscal Year Ended June 30, 2005 Report", June 2005

County of Imperial, Clerk of the Board of Supervisors office, "1972 Agreement between the City of Holtville and CCSMD", December 1972

County of Imperial, Clerk of the Board of Supervisors office, "Amendment to 1972 Agreement Between the City of Holtville and CCSMD", February 1977

The Holt Group, Inc., "Barbara Worth Forcemain Installation and Sanitary Sewer Pump Station Replacement Report", February 2006

Nolte Associates, Inc., "Water and Wastewater Rate Study", May 2005

Table 5 Proposed Wastewater Capital Improvements Plan

	2005 Estimated						
Project	Price	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	
Wastewater Plant Expansion							
Engineering	\$35,000		\$42,350				
Construction	\$665,000			\$804.650			
Land Acquisition		100		10000000000000000000000000000000000000	20000000000000000000000000000000000000	<b>高温度的</b>	
(Activity related to expansion)		<b>2000 000 000</b>	是规则统计	Pile		S. Sandari	
Purchase	\$250,000	\$250,000	)	No. of Chicago Control	SEAN DEVINE PRODUCTION	ice assessment of the	
Total Estimated Cost	\$950,000	\$250,000	\$42,350	\$804,650	\$0	\$0	
Wastewater Collection System	2005 Estimated						
Project	Price	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	
New Pump Station		SERVICE SERVICE	200	140	10 may 20 mg	A PROPERTY OF	
(Zenos Rd.)			State Section		<b>基集</b>		
Purchase/Installation	\$350,000		\$385,000				
	\$350.000		\$385,000				
	\$350,000 \$290,000		\$385,000	\$ 351,000		N. W.	
Sewer Outfall Pipeline			\$385,000	White he had been been been been been been been bee	\$4,525,000		
Sewer Outfall Pipeline Engineering Construction	\$290,000		\$385,000	White he had been been been been been been been bee	45.	2.0	
Sewer Outfall Pipeline Engineering Construction	\$290,000	\$100,000	\$385,000	White he had been been been been been been been bee	45.	\$146,000	
Sewer Outfall Pipeline Engineering Construction Sewer Line Maintenance	\$290,000 \$3,400,000	\$100,000 \$100,000		\$ 351,000	\$4,525,000	\$146,000 \$146,000	



#### PROJECT FINANCING

The City prefers to finance the proposed projects primarily by debt and grants. The City's second preferred source of money is the existing cash reserves of the Wastewater Capacity Fund and projected revenue from Wastewater Impact Fees on future developments. The third source of funds is the cash reserves of the Wastewater Enterprise Fund. For purposes of this study, revenue bonds issued through FY2007 will have a 5.5% interest rate with a payback period of 30 years. Revenue bonds issued after FY2007 will have an interest rate of 6.0% with a payback period of 30 years.

The City's ability to finance projects through debt is hindered by the resulting net annual debt service. The City should maintain the ratio of net operating income to net debt service at a level greater than 1.2. Due to service on existing debt and the additional debt service with future bond issuances, the City will not be able to finance the projects entirely through debt. Much of the costs of the CIP will be financed through anticipated capacity fees, existing capacity fee balance, and cash reserves from the Wastewater Enterprise Fund.

The City projects 200 new single family homes will be constructed annually within the city limits beginning in FY2009. These homes will pay an Impact Fee to the Wastewater Capacity Fund, however many of the scheduled capital improvements will be installed before the Impact Fees are collected. The City does not have sufficient cash reserves to fund the proposed projects. Therefore, the City will need to finance the improvements through additional indebtedness. Impact Fee revenue is projected to be substantial beginning in FY2009.

#### REVENUE BOND ISSUANCES

From Table 5, the City is planning improvements during all of the fiscal years examined in this Rate Study. The most significant expenditures are scheduled for FYs 2008 and 2009. Through FY2008, the projected capital expenditures will be in excess of \$2 million. Capital funding requirements for all of the projects through FY2010 near \$7 million. This study



recommends that the City issue revenue bonds two times through FY2010. Revenue bonds should be issued in during FY2007 (\$1,850,000) and FY2009 (\$3,350,000).

Table 6 Proposed Wastewater Capital Improvements Finance Schedule

Fiscal Year	 2006		2007		2008		2009		2010	_	Total
Requirements											
Capital Funding	\$ 350,000	\$	537,350	\$	1,276,650	\$	4,658,000	\$	146,000	\$	6,968,000
Sources											
Existing Available Funding Sources											
Capacity Fund Balance (July 1)	228,397		32,965		33,624		23,960		24,200		
Transfer In (Impact Fees)	-		-				1,332,841		1,466,125		2,798,967
Capacity Fund Expenditures	200,000		-		10,000		1,332,841		146,000		1,688,841
Capacity Fund Interest Income	 4,568	_	659	_	336	_	240	_	242		6,045
Capacity Fund Balance (June 30)	32,965		33,624		23,960		24,200		1,344,568		
Use of Enterprise Fund Reserves	150,000		-				-				150,000
Funds to be Financed by Bonds	-		537,350		1,266,650		3,325,159		-		5,129,159
New Available Funding Sources											
Bond Balance (July 1)	-		-		1,294,150		40,442		32,187		
Bonds (2007, 30 years at 5.5%)	-		1,850,000				-		-		1,850,000
Bonds (2009, 30 years at 6%)							3,350,000				3,350,000
Less Cost of Bond Issuance	-		18,500		-		33,500		-		52,000
Interest from Bond Balance	 -			_	12,942		404		322		13,668
Bond Balance (June 30)	\$ -	\$	1,294,150	\$	40,442	\$	32,187	\$	32,509		

Each bond issuance has a budgeted underwriter's fee of 1% of the bond issuance, which will be paid from the bond proceeds. These bonds, along with expenditures from the Wastewater Enterprise and Capacity Funds, will provide financing for projects scheduled through FY2010. The bonds will provide the City with a combined \$5,200,000 to finance the projects scheduled in Table 5.

#### WASTEWATER IMPACT FEES

In order to finance the proposed capital projects, the City will need to utilize some of its existing impact fee balance and anticipated Impact Fee income. Impact Fee revenue based on existing rates will not be sufficient to finance the proposed projects. When compared with impact fees charged by other cities and water districts, the existing City Wastewater Impact Fee is comparable to most levied in the Imperial Valley. However, it is substantially lower



than those in Imperial County that have recently modified Impact Fees and communities elsewhere in Southern California. A significant portion of the proposed CIP increases the capacity of processes or is driven because of anticipated new developments. As a result, the City should increase the capacity fees so that they may contribute an equitable share of the financial burdens of the Capital Improvements Plan. Furthermore, the City should incorporate annual increases into the Capacity Fee in order to adjust for inflation.

This study assumes that the Wastewater Capacity Fund balance will be \$228,397 on July 1, 2005. The recommended Impact Fees are shown on Table 7. The projected annual Impact Fee income is shown on Table 8. This revenue is based on an annual growth of 200 Equivalent Dwelling Units (EDUs) (single family homes) paying capacity fees, beginning in FY2009, and on recommended wastewater capacity fee modifications that have not been approved by the City.

 Table 7 Recommended Wastewater Impact Fees

Land Use	Exist	ing FY2005	FY2006	FY2007	FY2008	FY2009	FY2010
Residential (per Dwelling Unit)							
Single-Family/Duplex	\$	2,554	5,007	5,508	6,058	6,664	7,331
Multi-Family		1,384	2,713	2,985	3,283	3,611	3,972
Mobile Home		2,280	4,470	4,917	<b>5,40</b> 8	5,949	6,544
Non-Residential (per 1,000 sf unless otherwise noted)		-					-
Retail		1,440	2,823	3,105	3,416	3,757	4,133
Restaurants		-					
Sit-down		3,114	6,105	6,715	7,387	8,125	8,938
Fast food		2,336	4,580	5,037	5,541	6,095	6,705
Motel (per room)		1,080	2,117	2,329	2,562	2,818	3,100
Laundromat		3,260	6,391	7,030	7,733	8,506	9,357
Office		959	1,880	2,068	2,275	2,502	2,753
General Industrial		346	678	746	821	903	993
Water-Intensive Industrial		1,250	2,451	2,696	2,965	3,262	3,588



**Table 8 Projected Wastewater Impact Fee Revenue** 

	Wa	astewater Impact	Number	of EDUs	Anr	nual
Fiscal Year		Fee Per EDU	Added to	System	Impact Fee	
			Per`	Year	Inco	me
2005 (Existing)	\$	2,554		-	\$	-
2006	\$	5,007		-	\$	-1
2007	\$	5,508		-	\$	_
2008	\$	6,058		_	\$	-
2009	\$	6,664		200	\$ 1,33	2,841
2010	\$	7,331		200	\$ 1,466	6,125

Assumes 200 single family homes added annually, beginning in FY2009

#### WASTEWATER ENTERPRISE FUND CASH RESERVES

The Wastewater Enterprise Fund is projected to have a cash and cash-equivalent balance of \$475,380 on July 1, 2005 (Table 1). The Wastewater Enterprise Fund should continue to increase its cash and cash-equivalent balance during the upcoming fiscal years. Many of the proposed projects repair, replace, or enhance facilities that will be used by existing customers. In order to maintain the City's debt burden within financially acceptable levels, the City should use a portion of its Enterprise Fund reserves to help fund some of the CIP projects. The anticipated customer growth will permit the Fund's reserves to recover the invested balance quickly, so that it will be ready to pay for repair and replacement of portions of the system as they age and deteriorate, and also for emergency repairs.

#### DEVELOPMENT AND RECOMMENDATION OF USER RATE CHANGES

This section outlines the requirements and guidelines for modifications to the wastewater rates and shows and describes the rate changes. It outlines the recommended modifications to user rates to meet those budget requirements and guidelines. Following these is a comparison of the recommended rates to those charged by other communities in the Imperial Valley.



#### **BUDGET REQUIREMENTS AND GUIDELINES**

Several key criteria were used as guidelines and regulations to establish new wastewater rates. The rate increases were determined utilizing the following guidelines:

- The Wastewater Enterprise Fund should have an operating income greater than 1.2 times the Fund's net debt service
- Maintain rate increases to a minimum so that the impact to customers is minimized
- Maintain a positive cash balance in the Enterprise Fund
- Maintain a positive cash balance in the Capacity Fund.

#### RECOMMENDED USER RATES

Table 9 shows the approved and the recommended monthly wastewater user rates through FY2010.



**Table 9 Recommended Wastewater User Rates** 

	Category	Existin FY200	- FYZU	06 FY200	7 FY200	8 FY200	9 FY20
1	Single Family Residential Units	\$ 28.1	2 \$32.6	2 \$37.8	4 \$43.89	9 \$46.53	3 \$49.3
	Threshold (000 Gal.)	-	-	-	-		-
	Rate per 1,000 Over Threshold	-	-	-	-	-	-
2	All Multiple Residential Units	28.1	2 32.6	2 37.84	43.89	46.53	49.3
	Duplex						
	Triplex						
	Fourplex						
	Apartments w/ five or more						
	·						
	Mobile Home/Trailer Park (per space) Threshold (000 Gal.)	_	_	_	_		_
	Rate per 1,000 Over Threshold		_	-	-	_	-
_	Offices, Hardware, Variety, Pharmacy, Auto					<del></del>	
	Supply, Banks, S&Ls, Post Office, Fast Food,						
_	Quick Service Stores, Food Markets, Grocery	05.07	00.70	0454	40.07	40.47	45.0
3	Stores, Card Rooms, Barber Shops, Beauty	25.67	29.78	34.54	40.07	42.47	45.0
	Shops, Nursery (botanical), and other Small						
	Retail Businesses						
	Threshold (000 Gal.)	10			10	10	10
-	Rate per 1,000 Over Threshold	2.25		3.03	3.51	3.72	3.95
4	Churches, Meeting Rooms Threshold (000 Gal.)	25.67 - 25		34.54 25	40.07 25	42.47 25	45.02 25
	Rate per 1,000 Over Threshold	2.25		3.03	3.51	3.72	3.95
	Service Stations, Garage, Farm Shops, Car			0.00	0.01	0.72	0.00
	Washes, Milling Co., Ag Spray Shop, Lumber						
	Yard, Wood Refinish, Mill & Cabinet Shop,						
5	Newspaper, Print Shop, Ag Machine Shop and	37.02	42.94	49.81	57.78	61.25	64.93
	Dist., Auto Dealership (new or used), A/C and						
	Electrical Shop, Day Care, and Nursery Schools						
	Threshold (000 Gal.)	15	15	15	15	15	15
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
6 .	Restaurants, Bars, and Taverns - < 30 Seats	75.09	87.10	101.04	117.21	124.24	131.69
	Threshold (000 Gal.)	30	30	30	30	30	30
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
	Restaurants, Bars, and Taverns - > 30 Seats	136.67	158.54	183.90	213.33	226.13	239.69
	Threshold (000 Gal.)	60	60	60	60	60	60
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
,	Hotels, Motels, Inn, Rest Homes < 30 Seats	122.52	142.12	164.86	191.24	202.72	214.88
	Threshold (000 Gal.)	50 3.35	50	50	50	50 3.72	50 3.95
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51		
	Hotels, Motels, Inn, Rest Homes > 30 Seats	231.52	268.56	311.53	361.38		406.05
	Threshold (000 Gal.)	175	175	175	175	175	175
_	Rate per 1,000 Over Threshold	2.25	2.61 149.14	3.03	3.51 200.68	3.72 212. <b>7</b> 3	3.95 225.49
-	Laundromats Threshold (000 Gal.)	128.57 100	100	173.00 100	100	100	100
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
_		184.41	213.92				323.42
	Threshold (000 Gal.)	150	150	150	150	150	150
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
. N	Meat Processing Plants, Produce Packing	104.41	212.02	240 14	207.84	205 12	222 42
1	Sheds, Coolers, Ice Plant	184.41	213.92	248.14	287.84	305.12	323.42
	Threshold (000 Gal.)	500	500	500	500	500	500
	Rate per 1,000 Over Threshold	2.25	2.61	3.03	3.51	3.72	3.95
_							

#### WASTEWATER IMPACT FEE COMPARISON

This study recommends a significant increase in the Wastewater Impact Fee charged to new developments. Table 11 and Figure 2 compare the existing and recommended Water Impact Fees to those charged elsewhere in the Imperial Valley and other places in the southwest. The existing Impact Fee is higher than most fees in the Imperial Valley. While the recommended fee is higher than those charged in other Valley communities, it is necessary to finance the improvements that support growth and ensure an equitable system "buy-in".

Table 11 Wastewater Capacity Fee Comparison

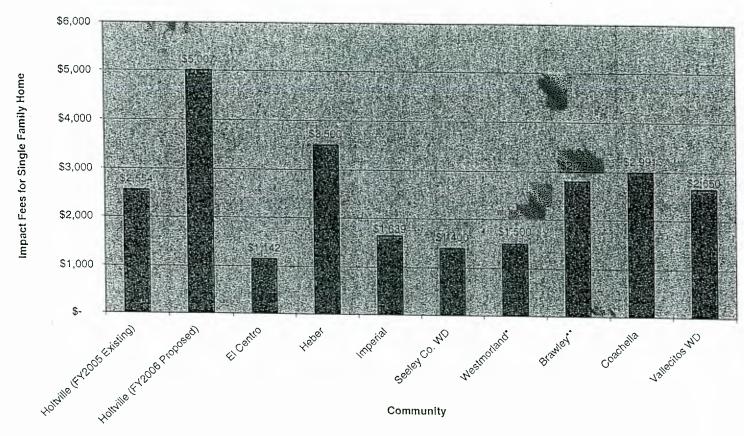
Community	Impact Fee
Holtville (FY2005 Existing)	\$ 2,554
Holtville (FY2006 Proposed)	\$ 5,007
El Centro	\$ 1,142
Heber	\$ 3,500
Imperial	\$ 1,639
Seeley Co. WD	\$ 1,400
Westmorland*	\$ 1,500
Brawley**	\$ 2,794
Coachella	\$ 2,991
Vallecitos WD	\$ 2,650

<sup>\*</sup>Based on inside city limit rate



<sup>\*\*</sup>Based on front footage less than 50 feet

Figure 2 - Wastewater Impact Fees



# PROJECTED WASTEWATER ENTERPRISE FUND BUDGETS AND DEBT SERVICE SCHEDULE

Included in this draft study are the projected budgets of the Wastewater Enterprise Fund, employing the recommended rate modifications. Table 12 shows the projected Wastewater Enterprise Fund budget through FY2010 with revenues based on the existing rate structure and recommended rate modifications that have not been approved by the City Council. This budget assumes that the recommended rate modifications become effective July 1, 2005.

The projected debt service schedule, including the payments of the 2003 bond issuance, is shown in Table 13. The schedule shows the annual debt service payments through 2038. The debt service schedule depends on the future bond issuances, not on the rate modifications that the City adopts. The annual debt service is projected to peak in FY2013.



Table 12 Proposed Wastewater Enterprise Fund Budgets

Fiscal Year		2005		2006		2007		2008		2009		2010	Total
Operating Revenues													
Sewer Charges	\$	642,944	\$	745,815	\$	865,145	\$	1,003,569	\$	1,119,614		\$ 1,305,153	5,682,23
Sewer CC		18,305		18,946		19,609		20,295		21,006	ò	21,741	119,90
Sewer Connections		1,714		1,774		1,836		1,901		200,000	1	200,000	407,22
Truck Disposal Service		36,259		37,528		38,654		39,813		41,008	1	42,238	235,50
Interest		5,256		9,508		<b>5,32</b> 5		2,464		1,569		2,949	27,07
Total Operating Revenues		704,478		813,571		930,569		1,068,042		1,383,196		1,572,081	6,471,93
Operating Expenses													
Sewer Trealment													
Salaries		91,718		100,889		110,978		122,076		134,284		147,712	707,658
Fringe Benefits		61,959		68,155		74,971		82,468		90,715		99,786	478,055
Personal Expenses		4,512		4,963		5,460		6,005		6,606		7,267	34,813
Materials, Supplies, and Services	_	176,050	_	193,655	_	213,021	_	234,323	_	257,755	_	283,531	1,358,335
Sewer Treatment Subtotal		334,239		367,663		404,430		444,873	,	489,360		538,296	2,578,861
Sewer Collection													
Salarles		102,701		112,971		124,268		136,695		150,365		165,401	792,402
Fringe Benefits		56,090		61,699		67,869		74,655		82,121		90,333	432,766
Personal Expenses		2,064		2,270		2,497		2,747		3,022		3,324	15,925
Materials, Supplies, and Services	_	51,867	_	57,054	_	62,760	_	69,036		75,939	_	83,533	400,189
Sewer Collection Subtotal		212,722		233,995		257,394		283,133		311,447		342,591	1,641,282
Total Operating Expenses		546,962		601,658		661,824		728,006		800,807		880,887	4,220,143
Operating Income (Loss)		157,516		211,913		268,745		340,036		582,390		691 <b>,19</b> 3	2,251,793
Reserve for Sewer Operations & Maintenance				50,000		55,000		60,500		66,550		73,205	305,255
Fransfer Out (In) to General Fund		73,608		80,969		89,066		97,972		107,769		118,546	567,931
Capital Outlay from Enterprise Fund				150,000				•		-		•	150,000
New Debt Service													
Debt Service (2007 bonds)								\$127,290	\$	127,290		\$127,290	381,870
Debt Service (2009 bonds)				<u>.</u>						-	5	243.374	243,374
New Debt Service Total		-						127,290		127,290		370,664	625,244
Existing Debt Service													
1999 Series		140.095		140,095		144,525		143,738		142,775		141,725	852,953
Existing Debt Service Total		140,095		140,095		144,525		143,738		142,775		141,725	852,953
let Debt Service		140,095		140,095		144,525		271,027		270,065		512,389	424,715
perating Income/Net Debt Service		1.12		1.51		1.86		1.25		2.16		1.35	
und Cash Balance - July 1		531,567		475,380		266,229		246,384		156,920		294,925	
und Cash Balance - June 30	S	475,380 \$	_	266,229	_	246,384 \$		15	_	204,925	\$	281,978	
ate Increase % from Previous FY - Fixed Rate		0%		16%		16%		16%	6	5%		6%	
ate Increase % from Previous FY - Var. Rate		0%		16%		16%		16%		5%		6%	



Table 13 Projected Wastewater Debt Service Schedule

	2003	2007	2009	
FY	Series	Series	Series	Total
2005	140,095			140,095
2006	144,525			144,525
2007	143,738			143,738
2008	142,775	\$127,290		270,065
2009	141,725	\$127,290		269,015
2010	139,975	\$127,290	\$243,374	510,639
2011	143,225	\$127,290	\$243,374	513,889
2012	141,225	\$127,290	\$243,374	511,889
2013	144,255	\$127,290	\$243,374	514,919
2014	141,975	\$127,290	\$243,374	512,639
2015	139,725	\$127,290	\$243,374	510,389
2016	142,081	\$127,290	\$243,374	512,745
2017	144,144	\$127,290	\$243,374	514,808
2018	140,913	\$127,290	\$243,374	511,576
2019	142,681	\$127,290	\$243,374	513,345
2020	144,156	\$127,290	\$243,374	514,820
2021	140,338	\$127,290	\$243,374	511,001
2022	141,519	\$127,290	\$243,374	512, <b>1</b> 83
2023	142,406	\$127,290	\$243,374	513,070
2024	143,000	\$127,290	\$243,374	513,664
FY2025-2	2038			6,588,577

### WASTEWATER RATE STUDY

#### **INTRODUCTION**

The City of Holtville (City) owns and operates a wastewater treatment facility and collection system that provides wastewater treatment service to the entire city and other entities nearby. Holtville, California is a growing community with a population near 6,000. It is located in Imperial County, 130 miles east of San Diego, CA and 10 miles northeast of Mexicali, Baja California, Mexico. The average daily wastewater generation is approximately 600,000 gallons per day (gpd).

#### **PURPOSE OF STUDY**

This study recommends modifications that should be made to the wastewater user rates and Impact Fees through FY2010 to enable the City to continue serve its wastewater customers well. This study projects operating expenses and debt service, and determines the user rates to produce operating revenues required to properly offset them. This study does not examine the use of other rate structures. This study examines Wastewater Impact Fees and recommends modifications to Wastewater Impact Fees that are charged to new developments. Scheduled user rate and Impact Fee adjustments are included in the recommended modifications.

The City is planning large wastewater capital improvements over the next five fiscal years. These improvements will both increase the capacity of the treatment, pumping, and discharge facilities to support the City's growth, and to repair, replace, and improve existing facilities to continue to reliably serve existing customers.

The City completed a Water Master Plan and Wastewater Master Plan in 1998. Following these plans, the City determined several capital improvements that need to be made to its collection, pumping, and treatment infrastructures within the next five fiscal years. Many of the projects in the Master Plan's Capital Improvements Plan (CIP) have been completed. This study is based on an updated CIP that outlines wastewater capital projects through FY2010. To finance these proposed projects, this study determines what indebtedness and annual



operating and capacity revenues will be required to offset projected operational and capital expenditures through FY2010.

#### STUDY ASSUMPTIONS

Several key assumptions make up a substantial portion of the foundation of this study. The basis of this study is the Capital Improvements Plan included in this Rate Study. This CIP was compiled during preparation of this study by incorporating the CIP from the 1998 Wastewater Master Plan, contributions from the City's engineer (The Holt Group), and input from City. The projects scheduled for the first five years of the CIP will be a principal component of the anticipated expenditures outlined in this study.

The following were assumed to complete this study:

#### Growth and Capital Improvements:

- 200 Equivalent Dwelling Units (EDUs) (single family homes) will be added to the system annually beginning in FY2009 (City Finance Director 12 April 2005).
- New accounts will contribute operational revenue for six months of the first fiscal year of their existence and for 12 months per year thereafter.
- The City's first preferred source of financing capital projects is grants, followed by debt, capacity fees, then cash reserves.

#### Revenue:

- Usage revenue is projected by averaging revenues from a high season month (July 2004) and a low season month (December 2003), multiplied by 12 for the annual projected revenue.
- Interest income will be based on a 2.0% interest rate through FY2007. After FY2007, interest income will be based on a 1.0% interest rate.
- Sewer CC (country club) revenue will total \$18,946 in FY2005, increasing 3.5% annually, per City's five-year budget forecast
- Truck disposal service revenue will increase 3.5% in 2006, and by 3.0% annually thereafter.



- Connection fee revenue is based on \$1,000 per new connection.
- Wastewater rates will be modified on July 1 of each Fiscal Year, beginning July 1, 2005.
- Affects to revenue from variable rate wastewater charges as a result of water rate
  adjustments is negligible. Most sanitary sewer customers are on fixed monthly rates.
  Most revenue from customer types with variable wastewater rate charges is from the
  flat monthly fee, not the variable rate. In addition, those customers, such as
  restaurants, are not likely to have a significant drop in water consumption.
- The City should maintain the ratio of net operating income to net debt service at a level greater than 1.2.

#### Expenses:

- Revenue bonds issued through FY2007 will have a 5.5% interest rate with a payback period of 30 years. Revenue bonds issued after FY2007 will have an interest rate of 6.0% with a payback period of 30 years.
- Bond repayment will commence during the fiscal year following the fiscal in which the bond issuance occurred.
- Annual reserves for sewer operations and maintenance will total \$50,000 in FY2006, increasing 10% annually.
- Annual transfers to the City's General Fund begin in FY2006 and grow by 10% annually. FY2006 transfer is \$73,610 per the City's five year forecast.
- Salaries and fringe benefit costs will increase 10% annually, per direction from the City.
- Personal expenses and materials, supplies, and services will increase 10% annually, per direction from the City.

The following documents were used as bases for this study:

- 1998 Wastewater Master Plan
- Capital Improvements Plan from The Holt Group (March 2005)
- Resolutions outlining wastewater user rates and impact fees



- Yearly budget summary for month ending 30 November 2004
- FY2005 Estimated Revenues and Expenditures, received by Nolte 23 Feb 2005
- City of Holtville Five-Year Financial Projections, received by Nolte 23 Feb 2005
- Planned improvements and staffing additions from the City's Wastewater Treatment and Collection staff
- Billing records from the City (February and July 2004)
- Discussions with City staff during Rate Study progress meetings

#### **BACKGROUND**

There are two funds associated with the water rate study:

Wastewater Enterprise Fund

Wastewater Capacity Fund

The Wastewater Enterprise Fund is used by the City to handle operations, maintenance, salaries, debt service, and equipment purchases to provide wastewater collection and treatment services to its customers. This is the principal fund that the wastewater system uses. The Wastewater Capacity Fund is used to finance capital projects associated with growth. It receives funds from connection fees paid from new developments. Table 1 below shows the balances in each of the funds analyzed in this study.

Table 1 Wastewater Funds Cash and Cash Equivalent Balances

Fund Name	Balance as of June 30, 2004	Projected Balance as of June 30, 2005
Wastewater Enterprise Fund	\$531,567	\$475,380
Wastewater Capacity Fund	\$224,208	\$228,397

Source: City of Holtville, Five Year Budget Forecast; Table 12



## DESCRIPTION OF APPROVED WASTEWATER RATES AND IMPACT FEES

Wastewater usage charges are based on fixed and fixed to variable rate structures. Depending on the customer rate class, customers are charged a monthly flat fee, or charged a flat monthly fee plus a charge per gallon of water consumed above a threshold. The threshold is separate for each customer rate class. The approved existing wastewater user rates are shown in Table 2.



**Table 2 Approved Monthly Wastewater User Rates** 

1	Category	Existin FY200
1	Single Family Residential Units	\$ 28.1
1	Threshold (000 Gal.)	-
L	Rate per 1,000 Over Threshold	-
2	All Multiple Residential Units	28.1
	Duplex	
	Triplex	
	Fourplex	
	Apartments w/ five or more	
	Mobile Home/Trailer Park (per space)	
	Threshold (000 Gal.)	-
_	Rate per 1,000 Over Threshold	
	Offices, Hardware, Variety, Pharmacy, Auto	
	Supply, Banks, S&Ls, Post Office, Fast Food,	
3	Quick Service Stores, Food Markets, Grocery	25.67
	Stores, Card Rooms, Barber Shops, Beauty Shops, Nursery (botanical), and other Small	
	Retail Businesses	
	Threshold (000 Gal.)	10
	Rate per 1,000 Over Threshold	2.25
4	Churches, Meeting Rooms	25.67
	Threshold (000 Gal.)	25
	Rate per 1,000 Over Threshold Service Stations, Garage, Farm Shops, Car	2.25
	Washes, Milling Co., Ag Spray Shop, Lumber	
	Yard, Wood Refinish, Mill & Cabinet Shop,	
5	Newspaper, Print Shop, Ag Machine Shop and	37.02
	Dist., Auto Dealership (new or used), A/C and	
	Electrical Shop, Day Care, and Nursery Schools	
	Threshold (000 Gal.)	15
	Rate per 1,000 Over Threshold	2.25
6	Restaurants, Bars, and Taverns - < 30 Seats	75.09
	Threshold (000 Gal.)	30
	Rate per 1,000 Over Threshold	2.25
	Restaurants, Bars, and Taverns - > 30 Seats	136.67
	Threshold (000 Gal.)	60
7	Rate per 1,000 Over Threshold	2.25 122.52
/	Hotels, Motels, Inn, Rest Homes < 30 Seats Threshold (000 Gal.)	50
	Rate per 1,000 Over Threshold	2.25
	•	- 1
	Hotels, Motels, Inn, Rest Homes > 30 Seats Threshold (000 Gal.)	231.52 175
	Rate per 1,000 Over Threshold	2.25
8 1	Laundromats	128.57
	Threshold (000 Gal.)	100
	Rate per 1,000 Over Threshold	2.25
9	Schools, High, Jr. High, and Elementary	184.41
	Threshold (000 Gal.) Rate per 1,000 Over Threshold	150 2.25
	Meat Processing Plants, Produce Packing	
111	Sheds, Coolers, Ice Plant	184.41
	Threshold (000 Gal.)	500
	Rate per 1,000 Over Threshold	2.25
	Connection Fee \$	1,000



The City last modified wastewater user rates in 2003 in Resolution No. 03-20. Prior to this, wastewater user rates were adjusted in 1991 in Resolution 91-28. The resolutions did not include scheduled annual increases to the user rates.

The number of wastewater accounts has not significantly varied in the last five fiscal years. However, the City anticipates that significant development and growth in wastewater accounts will take place within the next five fiscal years. As this occurs, additional infrastructure will be required to serve new customers. Operating expenses will also rise due to the increasing costs of energy, materials, labor, and an expanded system.

Impact fees are charged by the City to recuperate previous, current, and/or future costs for expansion of the capacities of the wastewater treatment, pumping, collection, and discharge systems. The size of such facilities generally prohibits them from being constructed to serve just one development or a group of developments. For example, a new treatment process unit would serve more than just one development. As a permit is pulled for a house, office building, apartment complex, or other structure, the builder pays to "buy-in" to the system. The Impact Fee is generally not required for replacement of existing structures that were previously connected to the wastewater system. The City and its customers have, over the years, financed the construction of the existing water system. It would unfair to those customers to allow the constructor to connect to the wastewater system without contributing his financial share. Therefore, Impact Fees are required to recuperate costs system expansion. The City set Impact Fees in 1996 in Resolution No. 96-01, and remain at that level today. The resolutions did not include scheduled annual increases to the Impact Fee.



**Table 3 Existing Wastewater Impact Fees** 

Land Use	Wastewater Impact Fee
Residential (per Dwelling Unit)	
Single-Family/Duplex	\$ 2,554
Multi-Family	1,384
Mobile Home	2,280
Non-Residential (per 1,000 sf unless otherwise noted)	
Retail	1,440
Restaurants	
Sit-down	3,114
Fast food	2,336
Motel (per room)	1,080
Laundromat	3,260
Office	959
General Industrial	346
Water-Intensive Industrial	1,250

#### PROJECTED WASTEWATER REVENUE REQUIREMENTS

#### **OPERATING EXPENSES**

Operating expenses for FY2005 were budgeted at \$546,962, excluding debt payments, O&M capital outlay, and transfers out of the fund. Based on the City's five year budget forecast, salaries and fringe benefit costs, personal expenses, materials, supplies, and services will increase 10% annually, per direction from the City.

#### PERSONNEL ADDITIONS

According to the Wastewater Treatment Facility Supervisor, no additional staffing will be required during the next five fiscal years for the wastewater collection, pumping, or treatment services.



#### RESERVES FOR SEWER OPERATIONS AND MAINTENANCE

The City will reserve \$50,000 from the Wastewater Enterprise Fund for sewer operations and maintenance. This annual reserve will increase 10% per year.

#### **EXISTING DEBT SERVICE**

The City is paying off \$2,000,000 of revenue bonds issued in 1993 to fund improvements to the wastewater system. The bonds are scheduled to fully repaid in 2033. The existing debt service schedule through FY2020 is shown in Table 3. The annual debt service for the 2003 bonds is approximately \$141,000. The 2003 revenue bonds represent the entire outstanding debt of the wastewater enterprise.

Table 4 Existing Wastewater Debt Service Schedule

FY	2003 Series				
2005	140,095				
2006	144,525				
2007	143,738				
2008	142,775				
2009	141,725				
2010	139,975				
2011	143,225				
2012	141,225				
2013	144,255				
2014	141,975				
2015	139,725				
2016	142,081				
2017	144,144				
2018	140,913				
2019	142,681				
2020	144,156				
FY2021-2033	1,850,463				



#### **CAPITAL IMPROVEMENTS**

Capital improvements are large construction or repair projects that are not associated with normal operations and maintenance of the wastewater system. These projects increase the capacity of a facility for existing and future customers, increase the facility's performance, extend a facility's useful life, or repair or replace an existing facility with a more effective or efficient facility. In many cases, these projects' large costs cannot be paid for by grants or cash reserves and require the City to finance the project through debt. The capital projects are scheduled throughout a specific study period and then combined with the estimated cost for each project.

A Capital Improvements Plan (CIP) was developed during the formation of this Rate Study. The wastewater treatment, pumping, collection, and discharge facilities are slated to undergo a substantial expansion to serve new developments and improve service to existing customers within the next five years. The anticipated improvements are shown on Table 5.

