#### VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY



### CAPACITY FEE UPDATE (NEXUS) STUDY

OPTION: A RECESSION MODEL

#### TABLE OF CONTENTS

ntroduction	2
Sackground	3
Methodology	4
Projected Growth and Demand	6
Projected Capital Facilities	7
Capacity Fee Calculations	8
Financing the CIP	9
Final Step of Adopting a Capacity Fee	12
Summary and Recommendations	13
Appendix I – Projected EDUs	14
Appendix II – CIP Summary	15
Appendix III – Capacity Fee Calculation	16
Appendix IV – Capacity Fee Calculation Description	17

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#### Introduction

The Victor Valley Wastewater Reclamation Authority ("VVWRA" or the "Authority") is a California Joint Powers Authority (JPA) that owns and operates regional wastewater collection and treatment facilities serving the Victor Valley area. The Authority's service area includes the Town of Apple Valley, the City of Hesperia, the City of Victorville, the Southern California Logistics Airport, and San Bernardino County Services Areas 42 (Oro Grande) and 64 (Spring Valley Lake).

VVWRA owns and maintains 40.5 miles of interceptor sewers, two pump stations and a regional wastewater reclamation plant. A portion of the interceptor system is constructed in the stream bed of the Mojave River. The existing wastewater reclamation plant is rated for 12.5 Million Gallons per Day (MGD), which is further defined under the Authority's operating permit as 8.3 MGD discharge to the Mojave River and 4.2 MGD discharge to percolation ponds. The process at the regional treatment plant consists of screening, grit removal, primary clarification, biological oxidation of wastes with complete nitrification, secondary clarification, coagulation, flocculation, filtration, and disinfection. In April 2005 construction began on a project that will expand the capacity of the regional treatment facility to 14.5 MGD. Completion of this expansion is expected in late 2007, by which time treated effluent is anticipated to equal 14.5 MGD.

In early 2005 design work began on the expansion of the regional treatment facility to a capacity of 18 MGD. Construction on this expansion phase is expected to begin in early 2006.

#### **Background**

The Authority adopted a Sewerage Facilities Plan Update on August 1, 2005<sup>1</sup>. On September 19, 2005 the Board adopted the Capital Improvement Plan (CIP) which incorporates a comprehensive projection of the additional facilities needed to meet the projected sewer capacity demands over a twenty-year period. The Authority's members are experiencing unprecedented growth and it is necessary to expand the existing treatment facility and build sub-regional treatment plants that can accommodate the growth and also meet the demand for non-potable water. In addition, the sub-regional plants will reduce the load on the truck sewers transporting sewage to the existing wastewater treatment plant. The proposed capital plan provides two major benefits; it provides a much-needed supply of non-potable water and mitigates some of the need to construct additional trunk sewer capacity near the Mojave River.

Capacity Fee Update Study A Page 3 of 17

<sup>&</sup>lt;sup>1</sup> Sewerage Facilities Plan Update Year 2005 Amendment (An amendment and supplement to the Sewerage Plan Prepared in 1997 by McDonald-Stevens Engineers, Inc.)

#### Methodology

The purpose of this report is to translate the cost of the updated CIP into an appropriate capacity fee in compliance with the law, as noted in the following sections of Government Code 66013:

- 66013. (a) Notwithstanding any other provision of law, when a local agency imposes fees for water connections or sewer connections, or imposes capacity charges, those fees or charges shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed, unless a question regarding the amount of the fee or charge imposed in excess of the estimated reasonable cost of providing the services or materials is submitted to, and approved by, a popular vote of two-thirds of those electors voting on the issue.
  - (b) As used in this section:
- (1) "Sewer connection" means the connection of a structure or project to a public sewer system.
- (2) "Water connection" means the connection of a structure or project to a public water system, as defined in subdivision (f) of Section 116275 of the Health and Safety Code.
- (3) "Capacity charge" means a charge for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that are of benefit to the person or property being charged.
- (4) "Local agency" means a local agency as defined in Section 66000.
- (5) "Fee" means a fee for the physical facilities necessary to make a water connection or sewer connection, including, but not limited to, meters, meter boxes, and pipelines from the structure or project to a water distribution line or sewer main, and that does not exceed the estimated reasonable cost of labor and materials for installation of those facilities.
- (c) A local agency receiving payment of a charge as specified in paragraph (3) of subdivision (b) shall deposit it in a separate capital facilities fund with other charges received, and account for the charges in a manner to avoid any commingling with other moneys of the local agency, except for investments, and shall expend those charges solely for the purposes for which the charges were collected. Any interest income earned from the investment of moneys in the capital facilities fund shall be deposited in that fund.
- (d) For a fund established pursuant to subdivision (c), a local agency shall make available to the public, within 180 days after the last day of each fiscal year, the following information for that fiscal year:
  - (1) A description of the charges deposited in the fund.
- (2) The beginning and ending balance of the fund and the interest earned from investment of moneys in the fund.
  - (3) The amount of charges collected in that fiscal year.
  - (4) An identification of all of the following:

Capacity Fee Update Study A Page 4 of 17

- (A) Each public improvement on which charges were expended and the amount of the expenditure for each improvement, including the percentage of the total cost of the public improvement that was funded with those charges if more than one source of funding was used.
- (B) Each public improvement on which charges were expended that was completed during that fiscal year.
- (C) Each public improvement that is anticipated to be undertaken in the following fiscal year.
- (5) A description of each interfund transfer or loan made from the capital facilities fund. The information provided, in the case of an interfund transfer, shall identify the public improvements on which the transferred moneys are, or will be, expended. The information, in the case of an interfund loan, shall include the date on which the loan will be repaid, and the rate of interest that the fund will receive on the loan.
- (e) The information required pursuant to subdivision (d) may be included in the local agency's annual financial report.
- (f) The provisions of subdivisions (c) and (d) shall not apply to any of the following:
- (1) Moneys received to construct public facilities pursuant to a contract between a local agency and a person or entity, including, but not limited to, a reimbursement agreement pursuant to Section 66003.
- (2) Charges that are used to pay existing debt service or which are subject to a contract with a trustee for bondholders that requires a different accounting of the charges, or charges that are used to reimburse the local agency or to reimburse a person or entity who advanced funds under a reimbursement agreement or contract for facilities in existence at the time the charges are collected.
  - (3) Charges collected on or before December 31, 1998.
- (g) Any judicial action or proceeding to attack, review, set aside, void, or annul the ordinance, resolution, or motion imposing a fee or capacity charge subject to this section shall be brought pursuant to Section 66022.
- (h) Fees and charges subject to this section are not subject to the provisions of Chapter 5 (commencing with Section 66000), but are subject to the provisions of Sections 66016, 66022, and 66023.
- (i) The provisions of subdivisions (c) and (d) shall only apply to capacity charges levied pursuant to this section.

Based on the foregoing code section it is necessary to determine the projected growth in the service area, the demand for a given increment of growth and the facilities needed to accommodate that growth.

#### **Projected Growth and Demand**

The first step in the process is to determine the projected growth in the population of the service area and the corresponding increase in sewage discharge.

The population projections developed for this report are based on the 2005 Amendment to the Sewerage Facilities Plan<sup>2</sup>. The population projections are summarized in the Table 1 below.

Table 1 Service Area Population Projections

Member Entity	2005	2010	2015	2020	2025
Victorville inc. SCLA	90,652	115,645	134,065	155,418	180,172
CSA-42	774	774	774	774	774
CSA-64	12,193	14,135	16,386	17,058	17,058
Apple Valley	61,330	68,030	75,462	83,707	92,851
Hesperia	73,026	86,730	99,084	115,419	137,082
Total	237,975	285,314	325,771	372,376	427,937

The population projections were then translated into sewage discharge per equivalent dwelling unit (EDU). Based on industry averages the amount of discharge per EDU has been determined to be 245 gallons per day (GPD). (Appendix I)

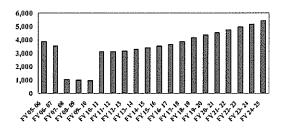
The member agencies of the authority have provided estimates for the number of new EDUs per year. Based upon the data underlying Table 1, a more conservative projection of future EDU's would take into consideration the cyclical nature of growth. This approach reflects a 70% reduction in EDU's over a 3-year period beginning in fiscal year 2007/2008. This is summarized in Figure 1 below.

Capacity Fee Update Study A Page 6 of 17

<sup>&</sup>lt;sup>2</sup> Sewage Facility Plan adopted August 1, 2005 update year 2005 amendment

Figure 1

Annual Increase in Sewage (EDUs)

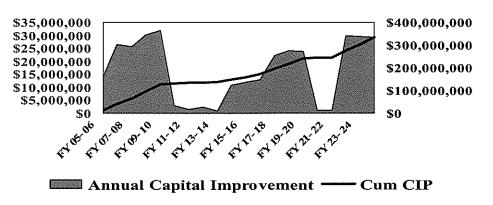


#### **Projected Capital Facilities**

Given the projected increase in sewage discharge and its timing as projected, Authority staff and its engineering consultants developed the CIP presented in Appendix II. Figure 2 provides a graphic summary of the aggregate CIP. The CIP noted in Figure 2 below includes only that portion of the VVWRA's capital program that addresses growth. The Authority has capital replacement and outlay expenses but those are funded through user charges.

Figure 2

Capital Improvement Program Requirements



The relatively large capital expense through fiscal year 2011-12 is the result of the need to construct the 18 MGD wastewater treatment plant expansion and the two sub-regional treatment facilities. These facilities are constructed in economical units and thus are initially oversized to

Capacity Fee Update Study A Page 7 of 17

accommodate future growth. As a result, VVWRA will incur large up-front capital expenses. It should be pointed out that the 18 MGD expansion will only provide treatment capacity up to 2012 given current growth projections, which represents only four years of capacity after it is finished. The proposed Hesperia and Apple Valley sub-regional treatment facilities are anticipated to provide an additional ten years of treatment capacity for the Authority. It generally takes 4 to 5 years lead-time for any major public works project. Consequently, facilities must be initiated well in advance of anticipated population growth.

#### **Capacity Fee Calculations**

The next step is to develop a Capacity Charge to pay for the CIP. The transportation, treatment, and disposal of sewage are considered a regional benefit and thus each EDU shares in the cost as well as the benefit.

Inasmuch as the CIP represents a multi-year program, the Authority must take into consideration construction cost inflation, anticipated timing of improvements, borrowing costs and the time value of money.

In order for the Capacity Fee program to work properly, program revenues have to equal as closely as possible aggregate CIP expenses with positive annual ending balance in the capital account. Capital expenditures in the CIP are adjusted annually for construction cost inflation utilizing a factor of 3%. This rate is based on the average of the Engineering News Record Index (ENR) since 1990. The method used for this report takes into consideration all the parameters previously discussed and develops a solution with a \$55 million ending balance in FY 2024-25. This fund balance can be used for additional capital projects, if needed, or used to pay off the remaining outstanding debt related to the CIP. Given the uncertainties of a twenty-year planning horizon, it is impossible to predict the exact outcome of the CIP as the size and timing if the capital program will be driven by growth.

The resulting charge per EDU of this calculation are noted in Table 2 and Appendix III.

Table 2
Projected Capacity fees

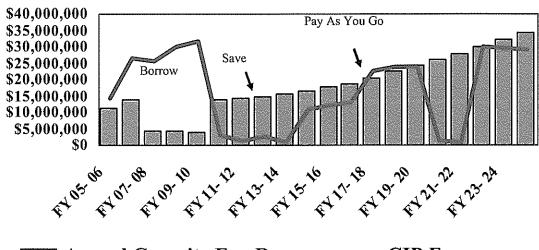
FY 05-06	FY 06- 07	FY 07- 08	FY 08- 09	FY 09- 10	FY 10-11	FY 11- 12	FY 12-13
\$3,215	\$3,360	\$3,511	\$3,669	\$3,834	\$4,006	\$4,187	\$4,375
FY 13- 14	FY 14- 15	FY 15- 16	FY 16- 17	FY 17- 18	FY 18- 19	FY 19- 20	FY 20- 21
\$4,572	\$4,778	\$4,993	\$5,217	\$5,452	\$5,698	\$5,954	\$6,222
FY 21- 22	FY 22- 23	FY 23- 24	FY 24- 25				
\$6,502	\$6,794	\$7,100	\$7,420				

In order to account for the time value of money the charge per EDU is adjusted by the 4.5% per year. This rate represents the approximate current yield on the ten-year treasury and serves as a proxy for the cost of money over time. If the Capacity Fee was not adjusted for the time value of money, it would then be set as a flat rate over time. Under this approach, the aggregate need of the CIP through the 20 year planning period (\$376,216,500 in the Base Line case) would simply be divided by the anticipated number of new EDU's over that interval (77,948). The resulting amount (\$4,826) would then become the Capacity Fee over the life of the program. The problem with this approach is that it penalizes earlier EDU's relative to later EDU's. The dollars contributed by the last EDU in 2024/25 in current dollar terms (i.e., 2005/06 dollars) would be significantly lower that the Capacity Fee paid now. Using a 4.5% cost of funds rate, \$4,826 paid in 2024/25 would only be worth \$2,000 in today's dollars. The adjustment for the time value of money provides for a measure of "generational equity" in the Capacity Fee structure.

#### Financing the CIP

Figure 3 depicts estimated income from Capacity Fees relative to projected CIP expenses. In the early years of the capital program, Capacity Fee revenue does not meet CIP expenses. The Table below dictates a strategy that includes bonding for a portion of the Authority's capital improvements. Thereafter, the program is designed to function on a pay-as-you-go basis. Figure 3 presents the program assuming the Alternative Case wherein annual EDU connections are reduced by 70% for a three-year period beginning fiscal year 2007/2008.

Figure 3
Capacity Fee Revenue and CIP Expenses



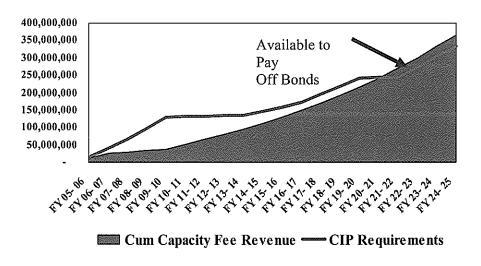
#### Annual Capacity Fee Revenue —— CIP Expenses

As discussed above, given the mismatch between Capacity Fee revenue and CIP an expense, borrowing is necessary to cover the projected shortfall. It can be noted that a borrowing of approximately \$70 to \$75 million in early 2006 will be required of the CIP and a second borrowing may be necessary and could be approximately \$20 million. Note that changes in the CIP, higher construction costs or reduced Capacity Fee revenue could result in additional financings.

It should be noted that the borrowing program provides sufficient funds, along with the Capacity Fee revenues, to fund the Authority's twenty-year CIP. As illustrated below, the Authority's projected cash flow will result in a residual cash balance for additional CIP expenses or moneys that allow for the pay off of VVWRA debt.

Figure 4 below is a demonstration of the cumulative revenue and expenses.

Figure 4
Cumulative Capacity Fees/CIP Base Line



#### Final Step of Adopting a Capacity Fee

The commissioners would review the draft report and make revisions as required. The next step is governed by Government Code § 66016 as follows:

"66016. (a) Prior to levying a new fee or service charge, or prior to approving an increase in an existing fee or service charge, a local agency shall hold at least one open and public meeting, at which oral or written presentations can be made, as part of a regularly scheduled meeting. Notice of the time and place of the meeting, including a general explanation of the matter to be considered, and a statement that the data required by this section is available, shall be mailed at least 14 days prior to the meeting to any interested party who files a written request with the local agency for mailed notice of the meeting on new or increased fees or service charges. Any written request for mailed notices shall be valid for one year from the date on which it is filed unless a renewal request is filed. Renewal requests for mailed notices shall be filed on or before April 1 of each year. The legislative body may establish a reasonable annual charge for sending notices based on the estimated cost of providing the service. At least 10 days prior to the meeting, the local agency shall make available to the public data indicating the amount of cost, or estimated cost, required to provide the service for which the fee or service charge is levied and the revenue sources anticipated to provide the service, including General Fund revenues. Unless there has been voter approval, as prescribed by Section 66013 or 66014, no local agency shall levy a new fee or service charge or increase an existing fee or service charge to an amount which exceeds the estimated amount required to provide the service for which the fee or service charge is levied. If, however, the fees or service charges create revenues in excess of actual cost, those revenues shall be used to reduce the fee or service charge creating the excess.

- (b) Any action by a local agency to levy a new fee or service charge or to approve an increase in an existing fee or service charge shall be taken only by ordinance or resolution. The legislative body of a local agency shall not delegate the authority to adopt a new fee or service charge, or to increase a fee or service charge.
- (c) Any costs incurred by a local agency in conducting the meeting or meetings required pursuant to subdivision (a) may be recovered from fees charged for the services which were the subject of the meeting."

#### **Summary and Recommendations**

This report is based on the CIP prepared by the Authority's engineers and adopted by the Board.

The sewer capacity fees described herein (and calculation explained in Appendix IV) are imposed as a condition of receiving a new sewer service and not as a condition of development approval or as incident of property ownership.

Since this report is a twenty-year plan it is recommended that the VVWRA conduct an annual review and make revisions to the Capacity Fee schedule as necessary.

It is recommended that the Commissioners approve the Capacity Fees and direct staff to proceed with public notice and hearing as previously described.

TABLE 2 - 6 VVWRA

#### 2005 SEWERAGE FACILITIES PLAN UPDATE

#### VVWRA Service Population, Wastewater Flows, and EDU Projections

	Victorvi	lie Including	SCLA	CS	A's 42 and 6	4	Town	of Apple Va	illey		Hesperia			Tota	als		Fiscal
Year	Sewered	Flow	EDU's	Sewared	Flow	EDU's	Sewered	Flow	EDU's	Sewered	Flow	EDU's	Sewered	Flow	EĐ	U's	Year
	Population	MGD	Current	Population	MGD	Current	Population	MGD	Current	Population	MGĐ	Current	Population	MGD	Current	Increase	EDUs
2004	81,514	7,41	30,249	12,612	0.85	3,450	20,610	1.81	7,383	15,720	1.47	5,990	130,456	11.53	47,073		
2005	87,859	7.99	32,594	12,967	0.88	3,579	22,863	2.04	8,314	17,382	1.65	6,739	141,071	12.55	51,226	4,153	
2006	94,205	8.56	34,959	13,333	0.91	3,712	23,698	2,13	8,703	19,171	1.83	7,450	150,407	13,43	54,824	3,598	3,875
2007	100,024	9.11	37,174	13,710	0.94	3,851	24,551	2.23	9,099	21,155	2.02	8,226	159,439	14.30	58,351	3,527	3,562
2008	105,165	9.60	39,191	14,098	0.98	3,997	25,488	2.33	9,525	23,344	2.22	9,073	168,096	15.14	61,785	3,434	1,044
2009	109,484	10.04	40,965	14,497	1.02	4,149	26,446	2.44	9,959	25,667	2.44	9,965	176,095	15.93	65,037	3,252	1,003
2010	112,853	10.40	42,456	14,909	1.06	4,308	27,493	2.55	10,424	28,131	2.67	10,906	183,385	16.68	68,093	3,056	946
2011	116,322	10.78	44,009	15,333	1.10	4,474	28,562	2.67	10,898	30,742	2,91	11,897	190,959	17.46	71,280	3,186	3,121
2012	119,895	11.18	45,628	15,770	1.14	4,650	29,726	2.79	11,406	32,717	3.11	12,684	198,108	18.22	74,368	3,089	3,137
2013	123,576	11.59	47,316	16,220	1.18	4,834	30,915	2.92	11,924	34,787	3.31	13,505	205,497	19.01	77,579	3,211	3,150
2014	127,367	12.02	49,076	16,683	1.23	5,028	32,204	3.06	12,477	36,933	3.52	14,354	213,187	19.83	80,936	3,357	3,284
2015	131,272	12.47	50,913	17,160	1.28	5,234	33,521	3.20	13,042	39,131	3.73	15,223	221,084	20.68	84,412	3,476	3,416
2016	135,294	12.94	52,830	17,652	1.34	5,451	34,944	3.34	13,644	41,411	3.95	16,122	229,300	21.57	88,048	3,636	3,556
2017	139,436	13,43	54,831	17,832	1.37	5,576	36,396	3.49	14,259	43,747	4.18	17,044	237,412	22,47	91,710	3,662	3,649
2018	143,703	13.95	56,922	17,832	1.38	5,651	37,962	3.65	14,913	47,135	4.49	18,313	246,632	23.47	95,799	4,089	3,876
2019	148,098	14.48	59,107	17,832	1.41	5,738	39,561	3.82	15,582	50,643	4.81	19,624	256,134	24.51	100,051	4,252	4,171
2020	152,625	15,04	61,391	17,832	1.43	5,837	41,279	3.99	16,292	54,312	5.14	20,993	266,047	25.61	104,514	4,463	4,357
2021	157,287	15.63	63,780	17,832	1.46	5,952	43,033	4.17	17,018	58,109	5.49	22,408	276,261	26.74	109,158	4,644	4,554
2022	162,090	16.24	66,280	17,832	1.49	6,084	44,823	4.35	17,759	62,081	5.85	23,885	286,826	27.93	114,008	4,850	4,747
2023	167,036	16.88	68,897	17,832	1.53	6,235	46,651	4.54	18,516	66,193	6.23	25,413	297,712	29.17	119,060	5,053	4,951
2024	172,131	17.55	71,637	17,832	1.57	6,409	48,518	4.73	19,290	70,493	6.62	27,007	308,973	30.46	124,343	5,282	5,167
2025	177,379	18.25	74,508	17,832	1.62	6,610	50,423	4.92	20,080	74,942	7.02	28,655	320,576	31.81	129,853	5,510	5,396

NOTE: Dates shown are as of July 1, the beginning of the annual fiscal year. The EDU's shown are based only on gallons of domestic wastewater (245gpd) and do not reflect the greater number of EDU's typical of high strength commercial and industrial wastewater.

### Appendix-II

# **VVWRA Capital Improvement Plan**

Project No.	Project Description 3.00%	0 FY 05- 06	1 FY 06-07	2 FY 07-08	3 FY 08- 09	4 FY 09- 10	5 FY 10-11	6 FY 11-12	7 FY 12-13	8 FY 13- 14	9 FY 14- 15	10 FY 15- 16
	Regional Plant 14.5 MGD Expansion Construction Project	\$12,500,000	\$12,875,000									
7	Regional Plant 18 MiciD Expansion Design/CEQA	000 000	164,400,16			AND THE OWNER OF THE OWNER OW						
\$	SCLA Reclaimed Water Pumping System Construction	2239,000		- The state of the			A CARACAS CONTRACTOR OF PROPERTY PROPERTY PROPERTY PROPERTY OF THE PROPERTY OF	THE PARTY AND ADDRESS OF THE PARTY OF THE PA	AND THE RESIDENCE PROPERTY OF THE PROPERTY OF	Manager of Commission of Assessment of Asses		Control of the second control of the second
+ 4	Subspicing Public Pelations Program FY 2005-2006	\$214.713										
9	Interceptor Capacity Modeling Study	\$112,852										
7	Interconnection with SCE for Peak Shaving	\$45,000										
00	Interceptor System Relief Sewer Phase I Design/CEQA/Permitting	\$437,661	A DESCRIPTION OF THE PROPERTY									
6	Upper Narrows Pump Station Design/CEQA/Permitting	S312,500									OR I S	
2	Interceptor System Relief Sewer Phase I Construction Project		51,803,163									
=	Interceptor System Relief Sewer Phase II Design/CEQA/Permitting		546,235									
12	Purchase Dump Truck		340,330									
13	Apple Valley Brewster Park 4 MGD Subregional Design/CEQA/Fermitting		21,287,300									
4	Apple Valley Brewster Park 4 MCD Subregional Property Acquisition		327,700									
2 2	Hespetia Freeway Corridor 4 MOD Submitted Beneatt Actualities		005.757.5									
2 5	Figure Narrous Cubreations CEOA (Proposition		5875 500									
:   2	Upper Parrows Suskepoilal CeCASTOSCIS Acquismon		\$1.287.500									
9 9	Telegrandor Custom Dalief Cause Phase II Construction Project		S184 937									
70,	Paniaral Diant 19 ACD Evanation Construction Project		\$5.150.000	\$5,304,500	\$5,463,635	\$5,627,544			10 10 to 10 10 10 10 10 10 10 10 10 10 10 10 10		**************************************	
3 5	Interceptor System Relief Sever Phase III Desiral/CEOA/Permitting	AND COLUMN TO THE PERSON OF TH	2000	\$120,490								
25	Apply Valley Desert Knoffs Sewnor Pumping System CEOA/Property Acquisition	A.I.: (1000)		\$530,450								
7 2	Hesperia I Avenue Sevage Pumning System CEOA/Property Acquisition			\$530,450								
24	Indecentor System Relief Sewer Phase III Construction Project			\$240.980	\$248.209							
3,5	Anna Vallan Dannetan Dale A MCD Cubrational Construction Desired			\$8.840.833	50 106 058	\$9.379.240						
3,5	Homoria Francis Caridar A MCD Subragional Construction Project	, and a second s	***************************************	\$8.840.833	89 106 058	\$9.379.240						
92	Hespetia riceway Colling + MOD Squiegibliai Colstitution Lines	AND DESCRIPTION OF THE PERSON		20010100	505 053							
170	Anala William Paper Papella Comerca Dumaina Caretom Decima			818 2015	C400 773							
20	Hagneria I Avenue Sewage Pumping System Design			\$795.675								
3	Intercentar System Relief Sewer Phase IV Construction Project			\$184.570	\$190.107							
3 2	Interceptor System Relief Source Dates V Design/CFOA/Pormitting				\$85.450			***************************************		AND THE WALLESON'S SAME AND A SAME A SAME A SAME AND A	AND THE PROPERTY OF THE PARTY O	
33	Apple Valley Decert Knolls Seware Primains System Construction	ALAMAN AND THE STREET,			\$2.731.818	S2.813.772						
7 2	Harneria I Avanue Centrane Pumping System Construction		ALL ALL AND		\$2,731,818	\$2.813.772	THE STREET PROPERTY OF THE STREET, STR	CHARLES AND ADDRESS OF THE PARTY OF THE PART		Andrew Western W. Brand Western	***************************************	abb A fulliance abbe fels A fullionAdministr
55	Many Administration Building Decim					\$140.689	\$144,909					
72	Intercentar System Paliaf Source Phase V Construction Project					\$176.027	\$181.308					
35	Interceptor System Relief Sewer Phase VI Design/CEOA/Permitting					\$41.481						
22	Naw Administration Building Construction Project					\$1,406.886	\$1,449,093		A PROGRAMMA A VARIABLE A PROGRAMMA A PARTICULAR DE PROGRAMA A PARTICULAR DE PROGRAMMA A PARTICUL	VII. III. II. II. II. II. II. II. II. II	**************************************	
i c	Intercentor System Relief Sever Phase VI Construction Project		-			\$82.961	\$85.450					
2 8	Emergency Preparedness Facilities Pine & Storage Bildo					\$42,207	\$43.473					The state of the s
9	New Administration Building Furniture & Equipment						\$869,456					
4	Intercentor System Relief Sewer Phase VII Design/CEOA/Permitting						\$278,955					
42	Regional Plant Expansion CEOA/Property Acquisition			-/				\$895,539	\$922,405			
43	Interceptor System Relief Sewer Phase VII Construction Project	VARABLE					A CONTRACT THE PRESENCE AND ADDRESS OF THE PRESENCE AND AD	SS74,646	\$591,885	THE CONTRACTOR OF THE CONTRACT		
44	Hesperia Freeway Corridor 8 MGD Subregional Expansion Design/CEQA								\$922,405	5950,078		
45	Hesperia Freeway Corridor 8 MGD Subregional Expansion Construction										\$10,873,110	\$11,199,303
46	Apple Valley Brewster Park 8 MGD Subregional Expansion Design/CEQA											\$1,007,937
47	Apple Valley Brewster Park 8 MGD Subregional Expansion Construction	A PARAMORPH PORTOR OF THE PARA										- PRO PRO VANDONINA VANDON
\$ <del>\$</del>	Interceptor System Relief Sewer Phase VIII Design/CEQA/Permitting	Manage Variation Committee					Warmer State of the State of th	The second section of the section of			WANTED BY A STATE OF THE STATE	
49	Interceptor System Relief Sewer Phase VIII Construction Project		and we constitute the constitute of the constitu		İ							
50	Regional Plant 22 MGD Expansion Design/CEQA											
51	Regional Plant 22 MGD Expansion Construction Project											
52	Interceptor Capacity Modeling Study, 2020 Update											
53	Regional Plant 30 MGD Expansion Design/CEQA	The state of the s					VIII COCCI VIAMINO MODINI POPERINA VI			V 80 6 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	**************************************	
54	Hesperia Freeway Corridor 12 MGD Subregional Expansion Design/CEQA											
55	Regional Plant 30 MGD Expansion Construction											
26	Hesperia Freeway Corridor 12 MGD Subregional Construction Project											
57	Grand Total Inflated	\$14,148,205	\$26,413,179	\$25,786,618	530,167,978	531,903,818	53,052,643	\$1.470,185	\$2,436,696	8950.078	\$10,873,110	\$12,207,240
58	The state of the s							1				- 1
59	Cum Inflated CIP	\$14,148,205	540,561,384	566,348,002	596,515,980	5128,419,798	5131,472,441	\$132,942,626	5135,379,323	\$136,329,400	5147,202,510	5159,409,750

### Appendix-II

# **VVWRA Capital Improvement Plan**

Transmitting   Transmitteng   Tran	So	820.C							7 7 7 7		C7-45 I 3	Total
Promiting   Project	П	Regional Plant 14.5 MGD Expansion Construction Project										\$25,375,000
Premining   Prem	- 1	Regional Plant 18 MGD Expansion Design/CEQA										\$1,054,494
Presenting   Presenting   Presenting   Presenting   Presenting   Presenting   Present   Presen		SCLA Reclaimed Water Pumping System Construction			MARKA AN ARCHA SA CAR STRUCTURE AND A SA STRUCTURE							\$239,000
Project		Subranional Public Palations Became EV 2005, 2005				***************************************	STREET, STREET, STREET, ST. STREET, ST. STREET, ST. STREET, ST. STREET, ST.	AND THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRE				5280,479
Interesting States   Part   Control		Succession of Lucie Actanomy Logistic, 11 2003-2009 Intercentor Canacity Modeling Study										\$112.852
Promitting   Pro	1	Interconnection with SCE for Peak Shaving										\$45,000
Apple Valves Prog. State of Beach ClayArmenting		Interceptor System Relief Sewer Phase I Design/CEQA/Permitting										\$437,661
Project   Proj		Upper Narrows Pump Station Design/CEQA/Permitting										\$312,500
Indication   Lange		Interceptor System Relief Sewer Phase I Construction Project										\$1,803,163
Principle Date   Prin		Interceptor System Relief Sewer Phase II Design/CEQA/Permitting										\$46,235
Apple Valp   Bresser First ALM Discharged in Design (2007)		Purchase Dump Truck										\$46,350
Hagein Value Research (1992) Substitution of the AUD Substitution (1992) Substitutio		Apple Valley Brewster Park 4 MGD Subregional Design/CEQA/Permitting										\$1,287,500
Acquisition		Apple Valley Brewster Park 4 MGD Subregional Property Acquisition										\$257,500
Acquisition	1	Hesperia Freeway Corridor 4 MGD Subregional Design/CEOA/Permitting								**************************************		\$1,287,500
Project   Proj	į.	Hesperia Freeway Corridor 4 MGD Subregional Property Acquisition										\$257.500
Octobal   Control   Cont	1	Unper Narrows Subresional CEOA/Property Acquisition										\$875.500
Project		Unner Narrows Pamp Station Construction Project										\$1.287.500
Project   Proj	1	Intercentor System Relief Sewer Phase II Construction Project										5184 937
Project   Proj		Panional Dian 18 MCD Expansion Construction Project	-	The Control of the Co	- CANADA				TOTAL COMMENTATION OF THE PROPERTY OF THE PROP	THE THE PERSON OF THE PERSON O	At Whitehold desirably his	621 545 670
\$11.535.282 \$11.535.282 \$11.535.282 \$1.058.175 \$1.058.1	ŀ	Internation Contain Delief Course Blees III Design/OFOA/Permitting				MANNEY ALTHRONOUS A MONTALTY CATALLY WITH	SERVING COUNTY OF COURT AND SERVING CO.	WHEN A THE TAMES OF THE PARTY O	CONTRACTOR OF STREET, STATE OF STATE OF STATE OF STREET, STATE OF ST			00F 0C 13
\$11.535,782 \$11.038,775 \$11.038,775 \$11.038,735 \$11.03	į	April Valley Decet Knolls Sewane Dimains System CEO & Property April 2016									AAVIII MAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	0.500 d 50
\$11,535,282 \$11,535,282 \$11,038,175 \$10,038,175 \$11,008,007 \$11,008,007 \$11,008,007 \$11,008,007 \$11,008,007 \$11,008,007 \$11,008,007 \$11,008,008 \$11,008 \$1		Apple Valley Lessel Knobs Demaine Cortem CEOA (Because A confession)										057,055
\$11.535.282 \$1.038.175 \$1.038.175 \$1.009.221	1	Transperia i Avenue Sewage rumping System Charlowery Argustinus										001.001.0
\$11.535.282 \$11.535.282 \$11.038.175 \$1.038.175 \$1.038.073 \$21.008.321 \$21.008.321 \$21.008.321 \$21.008.321 \$21.008.321 \$21.008.321 \$21.008.321 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.04914 \$21.008.0491 \$21.008.	1	Interceptor System rener sewer mass III Constitution myses							***************************************			201,704,105
\$11.535.282 \$11.038,175 \$11.038,175 \$11.038,175 \$11.00	ı	Apple Valley Brewster Park 4 INCID Subregional Construction Project			and the second s							321,326,132
\$\frac{\$11.535.282}{\$1.038.175}\$\$\frac{\$11.535.282}{\$1.038.178}\$\$\frac{\$11.5604.914}{\$1.006.321}\$\$\frac{\$11.069.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\frac{\$11.06.321}{\$1.006.321}\$\$\$11.06.	ì	Hesperia Freeway Corndor 4 McD. Subregional Construction Fruett				1					VV-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	251,025,125
\$11.535.282 \$10.535.282 \$10.538.175 \$10.538.175 \$10.538.175 \$10.536.302 \$10.53	- [	interceptor System Keller Sewer Phase IV Design/CEQAVI emitting										50,000
\$11,535,282 \$10,535,282 \$10,535,182 \$10,535,182 \$10,535,193 \$10,535 \$1	-	Apple Valley Desert Knolls Sewage Pumping System Design										5807.010
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$1,04,914 \$1,04,699	-1	Hesperia I Avenue Sewage Pumping System Design										5/9,56/5
\$11.535.282 \$11.038.175 \$11.038.175 \$1.038.175 \$1.038.175 \$1.066.321 \$1.066.321 \$1.066.321 \$1.066.321 \$1.066.321 \$1.066.321 \$1.008.049 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.101.898 \$1.108.894 \$1.101.898 \$1.108.894	-	Interceptor System Keller Sewer Phase 1V Construction Project			And the second second and the second	***************************************		AND THE STREET STREET,	Chambrid Arthur Art Freedom of the selection of the selec			0/0,4/60
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$4,23,083 \$4,23,083 \$4,23,083 \$4,23,083 \$1,069,231 \$1,009,804 \$1,		Interceptor System Relief Sewer Phase V Design/CEQA/Permitting									TVI VIEW TO A TO	105,082
\$11,535,282 \$11,535,282 \$1,038,175 \$1,038,175 \$1,008,201 \$2,505,073 \$2,505,07		Apple Valley Desert Knolls Sewage Pumping System Construction		AND DESCRIPTION OF THE PROPERTY OF THE PROPERT						W-117	W. Walderson, or a factor of the second	095,545,590
S11,535,282   S1,038,175   S12,237,781   S12,604,914   S12,337,781   S12,604,914   S12,337,781   S12,604,914   S12,337,781   S11,0400   S92,4629   S92,4	1	Hesperia I Avenue Sewage Pumping System Construction										55,545,590
S11,535,282   S11,881,341   S12,237,781   S12,604,914   S10,088,175   S10,081,175	- 1	New Administration Building Design										\$285,598
Sil. 535, 282	- 1	Interceptor System Relief Sewer Phase V Construction Project										\$357,334
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$2,535,073 \$2,535		Interceptor System Relief Sewer Phase VI Design/CEQA/Permitting								THE PROPERTY OF THE PROPERTY O		241,481
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,006,321 \$1,101,400 \$24,23,083 \$29,505,073 \$29,505,073 \$29,505,073 \$29,505,073 \$29,505,073 \$20,505,073	- 1	New Administration Building Construction Project			and a Loc vision account to the control of the cont	- Annean Commonwealth on the Common C	Server condenses and annual contract and annua	TANGETHE CONTACT STREET STREET	THE PARTY OF THE P			\$2,855,979
S11,535,282   S11,881,341   S12,504,914   S12,537,781   S12,604,914   S12,537,781   S12,604,914   S12,537,781   S11,0400   S9,505,073   S9,790,225   S110,440   S110,848   S110,898   S110,898,795   S110,444   S110,848   S110,898   S110,898,795   S110,444   S110,848   S110,898   S110,4331   S12,996,540   S12,996,540   S22,455,734   S24,027,104   S23,726,920   S11,554,93   S10,69,804   S12,004,027,03   S12,046,03   S12,040,040   S12,		Interceptor System Relief Sewer Phase VI Construction Project										\$168,411
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$1,039,321 \$1,009,321	ı	Emergency Preparedness Facilities. Pipe & Storage Bldg										\$85,679
\$11.535.282 \$11.038,175 \$11.038,175 \$11.069,321 \$1.06,321 \$1.069,321 \$1.060,321 \$1.069,3	- 1	New Administration Building Furniture & Equipment										\$869,456
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$1,039,130,132 \$2,505,073 \$2,505	-	Interceptor System Relief Sewer Phase VII Design/CEQA/Pennitting										\$278,955
S11,535,282   S1,038,175   S12,237,781   S12,604,914   S12,237,781   S12,604,914   S12,237,781   S12,604,914   S12,237,781   S12,604,914   S12,237,781   S12,604,914   S12,237,781   S1,014,40   S1,	- 1	Regional Plant Expansion CEQA/Property Acquisition										\$1,817,945
\$11,535,282 \$1,038,175 \$1,038,175 \$1,038,175 \$1,038,175 \$2,130,633 \$2,130,639 \$2,130,630		Interceptor System Relief Sewer Phase VII Construction Project	and the state of t							A charles on the second		\$1,166,531
\$11,535,782 \$1,038,175 \$4,25,083 \$1,089,321 \$1,081,341 \$1,082,395 \$1,083,931 \$1,01,088 \$2,505,073 \$	- [	Hesperia Freeway Corridor 8 MGD Subregional Expansion Design/CEQA										\$1,872,483
S11,038,175   S12,037,781   S12,604,914   S423,083   S924,629   S924,629   S924,629   S924,629   S924,629   S924,629   S924,629   S922,632,718   S11,014,00   S92,505,073   S97,90,225   S113,444   S11,038,445   S11,018,888   S12,194,524   S11,018,888   S12,194,524   S11,018,888   S12,194,524   S11,018,884   S12,194,524	- 1	Hesperia Freeway Corridor 8 MGD Subregional Expansion Construction	\$11,535,282									533,607,695
A S 22.455,734 S12.237,781 S12.604,914  S 92.308.30 S 924.629 S 924.629  S 92.05.073 S 97.090 S 924.629  A S 11.01.400 S13.404 S11.3444 S116.848  A S 11.01.898 S 11.01.898 S12.256,825  A S 11.01.898 S12.256,835  A S 11.01.898 S12.256,835  A S 11.01.898 S12.256,835  S 11.05.409 S12.256,835  S 11.05.409 S12.256,835  S 11.05.409 S12.256,835  S 11.05.409 S12.256,835  S 12.05.630,709 S22.255,101	- 1	Apple Valley Brewster Park 8 MGD Subregional Expansion Design/CEQA	\$1,038,175									\$2,046,113
Section   Sect	- 1	Apple Valley Brewster Park 8 MGD Subregional Expansion Construction		\$11,881,341	\$12,237,781	\$12,604,914			•		TAR OF THE PARTY O	\$36,724,036
Stroject   Stroject   Strotogy	- 1	Interceptor System Relief Sewer Phase VIII Design/CEQA/Permitting	\$423,083						months of the second of the se			\$423,083
S1,009,321   S1,101,400   S10,083,931   S1,101,808   S1,001,888   S1,001,888   S1,201,888   S1	į	Interceptor System Relief Sewer Phase VIII Construction Project			8897,699	\$924,629			į			\$1,822,328
sion Design/CEQA  sion Sign/CEQA  sign/CEQA  sion Sign/CEQA  sign/CECA		Regional Plant 22 MGD Expansion Design/CEQA		\$1,069,321	\$1,101,400							\$2,170,721
A SI13.444 S110.548 S1.009.804 S1.101.898 S1.276.825 S1	- 1	Regional Plant 22 MGD Expansion Construction Project		\$9,505,073	\$9,790,225	\$10,083,931						\$29,379,229
Expansion Design/CEQA  Expansion Design/CEQA  Construction Project  Construction Project  Grand Total Inflated  S12.996,540  S22.455,734  S24.027,104  S23.726,920  S1.155,493  S1.069,804  S1.069,804  S1.154,935  S1.069,804  S1.154,935  S1.069,804  S29.888,995  S29.650,709  S29.225,101	1	Interceptor Capacity Modeling Study, 2020 Update				\$115,444	5110,848	100000	000 101 10			\$230,292
Construction Project  S11,209,634 S11,349,534 S11,690,040  S11,349,534 S11,349,534 S11,690,040  S11,349,534 S11,349,534 S11,690,040  S11,349,534 S11,349,534 S11,690,040  S12,396,540 S11,549,540 S1		Regional Plant 30 MGD Expansion Design/CEUA					C+0,650,15	\$1,009,804	51,101,898	200 200 10		55,210,348
Construction Project Grand Total Inflated S12.996.540 S22.455,734 S24.027,104 S23.726,920 S1.155,493 S1.069.804 S29.888,995 S29.650,709 S29.225,101 S10.009.804 S13.706.920 S1.155,493 S1.069.804 S29.888,995 S29.650,709 S29.225,101 S10.009.804 S29.808,995 S29.650,709 S29.225,101 S10.009.804 S29.808,995 S29.		Hespena Freeway Corridor 12 Morb Supregional Expansion DesignOction							914 808 478		170 515 013	22.310,401
Grand Total Inflated S12,996,540 \$22,455,734 \$24,027,104 \$23,726,920 \$1,155,493 \$1,069,804 \$29,888,995 \$29,650,709 \$29,225,101 \$30,000 \$30,000 \$30,000		Regional Full 30 MOD Expulsion Consultation Hospania Pressus Corridor 12 MGD Subregional Construction Project	}		Anna Principal Company of the Compan		THE PART OF THE PA	THUTTH BOTTOM IN CALOUS CO.	511,018,984	+-	\$11,690,040	824 850 753
201 201 201 201 201 201 201 201 201 201		Grand Total	L	\$22,455,734	\$24,027,104	\$23.726.920	\$1,155,493	\$1.069.804	\$29,888,995	ł	\$29,225,101	\$333,606,150
144-4 (11) (11) (11) (11) (11) (11) (12) (13) (13) (13) (13) (13) (14) (14) (13) (13) (13) (13) (13) (13) (13)			J_									US.
200 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2		Cum befated CIP	\$172,406,291	\$194,862,025	5218.889.129	\$242,616,049	127 771 541	5244 841 346	5274 730 340		033 404 5523	2.72

## Capacity Fee Calculation

	EDU Adjustment	100.00%							
	4.50%	FY 05- 06	FY 06- 07	FY 07- 08	FY 08- 09	FY 09- 10	FY 10-11	FY 11- 12	FY 12-13
m	Beginning Balance	\$22,681,836	\$86,465,331	\$69,588,107	\$45,738,239	\$16,909,932	\$2,449,228	\$5,767,274	\$11,131,231
4	Source of Funds								
5	Number of New Connections	3,875	3,562	1,044	1,003	946	3,121	3,137	3,150
9	Charge Per EDU	\$3,215	\$3,360	\$3,511	\$3,669	\$3,834	\$4,006	\$4,187	\$4,375
<b>L</b> ~	Capacity Fee Revenue	\$9,911,245	\$11,968,748	\$3,665,948	\$3,679,777	\$3,627,860	\$12,504,771	\$13,135,363	\$13,780,630
∞	Interest Earnings	\$680,455	\$1,637,208	\$2,340,802	\$1,729,895	\$939,723	\$290,387	\$123,248	\$253,478
6	First Borrowing	\$74,000,000							
10	Second Borrowing					\$20,000,000			
11	Third Borrowing								
12	Total Source	84,591,700	13,605,955	6,006,750	5,409,672	24,567,582	12,795,158	13,258,611	14,034,108
13	Use of Funds								
4	Cost of Issuance	1,258,000	I	t	t	340,000	•	1	ŧ
15	Reserve Fund	5,402,000	1	1	ı	1,460,000	ı	ı	1
91	Capitalized Interest		ı	ŀ	ı		1	1	I
17	First Borrowing Debt		4,070,000	4,070,000	4,070,000	5,324,469	5,324,469	5,324,469	5,324,469
8	Second Borrowing Debt						1,100,000	1,100,000	1,100,000
61									
20									
21									
22	Capital Improvement Program	14,148,205	26,413,179	25,786,618	30,167,978	31,903,818	3,052,643	1,470,185	2,436,696
23	Total Use	20,808,205	30,483,179	29,856,618	34,237,978	39,028,287	9,477,112	7,894,654	8,861,165
24	Annual Balance	63,783,495	(16,877,224)	(23,849,868)	(28,828,306)	(14,460,705)	3,318,047	5,363,957	5,172,943
25	Ending Balance	86,465,331	69,588,107	45,738,239	16,909,932	2,449,228	5,767,274	11,131,231	16,304,174
	1					New York Control of the Control of t	and the second s	A Section and the Section of the Sec	of the second se

## Capacity Fee Calculation

FDU Adiustment

	EDU Adjustment								Commence of the Commence of th
	4.50%	FY 13- 14	FY 14- 15	FY 15- 16	FY 16- 17	FY 17- 18	FY 18- 19	FY 19- 20	FY 20-21
m	Beginning Balance	\$16,304,174	\$24,078,931	\$23,433,483	\$22,992,309	\$23,029,582	\$15,694,517	\$9,309,970	\$5,201,614
4	Source of Funds								
5	Number of New Connections	3,284	3,416	3,556	3,649	3,876	4,171	4,357	4,554
9	Charge Per EDU	\$4,572	\$4,778	\$4,993	\$5,217	\$5,452	\$5,698	\$5,954	\$6,222
7	Capacity Fee Revenue	\$15,013,880	\$16,322,493	\$17,753,956	\$19,038,004	\$21,130,917	\$23,762,273	\$25,944,073	\$28,333,161
∞	Interest Earnings	\$411,531	\$605,747	\$712,686	\$696,387	\$690,328	\$580,861	\$375,067	\$217,674
6	First Borrowing								***************************************
10	Second Borrowing								
Ξ	Third Borrowing								
12	Total Source	15,425,411	16,928,239	18,466,643	19,734,391	21,821,245	24,343,134	26,319,140	28,550,835
13	Use of Funds								
14	Cost of Issuance	1	•	1	•	•	1	j	ı
15	Reserve Fund	ı	ı	ı	ı	Ī	1	ı	ı
16	Capitalized Interest	ı	ı	•	•	1		1	ı
17	First Borrowing Debt	5,324,469	5,324,469	5,324,469	5,324,469	5,324,469	5,324,469	5,324,469	5,324,469
18	Second Borrowing Debt	1,376,108	1,376,108	1,376,108	1,376,108	1,376,108	1,376,108	1,376,108	1,376,108
61									
20									
21									
22	Capital Improvement Program	950,078	10,873,110	12,207,240	12,996,540	22,455,734	24,027,104	23,726,920	1,155,493
23	Total Use	7,650,654	17,573,687	18,907,817	19,697,117	29,156,311	30,727,681	30,427,496	7,856,069
24	Annual Balance	7,774,757	(645,447)	(441,175)	37,274	(7,335,065)	(6,384,547)	(4,108,356)	20,694,766
25	Ending Balance	24,078,931	23,433,483	22,992,309	23,029,582	15,694,517	9,309,970	5,201,614	25,896,380
	The same of the sa					Comments of the second of the			

## Capacity Fee Calculation

EDU Adjustment

Source of Funds  Source of Funds  Number of New Connections  Charge Per EDU  Capacity Fee Revenue  Interest Earnings  Pirst Borrowing  Second Borrowing  Third Borrowing  Cost of Issuance  Reserve Fund  Capitalized Interest  First Borrowing Debt  Second Borrowing Debt  Capital Improvement Program  Capital Improvement Program  Annual Balance					
Source of Fund Number of New Connet Charge Per EDU Capacity Fee Revenue Interest Earnings First Borrowing Third Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Second Borrowing Debt	g Balance	\$25,896,380	\$49,456,891	\$47,637,736	\$49,432,360
Number of New Conne Charge Per EDU Capacity Fee Revenue Interest Earnings First Borrowing Second Borrowing Third Borrowing Third Borrowing Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Second Borrowing Debt	sp				
Charge Per EDU Capacity Fee Revenue Interest Earnings First Borrowing Second Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Proposition of Balance Annual Balance	ctions	4,747	4,951	5,167	5,396
Capacity Fee Revenue Interest Earnings First Borrowing Second Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Pr		\$6,502	\$6,794	\$7,100	\$7,420
Interest Earnings First Borrowing Second Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt		\$30,864,422	\$33,640,117	\$36,689,491	\$40,037,266
First Borrowing Second Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Properties of the properties o		\$466,470	\$1,130,299	\$1,456,419	\$1,456,051
Second Borrowing Third Borrowing Tot Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Pr Annual Balance	•				
Third Borrowing  Tot  Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Preserve Fund Annual Balance					
Tot  Use of Funds  Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt  Capital Improvement Pr					
Use of Funds Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debt Capital Improvement Pr	Total Source	31,330,892	34,770,416	38,145,910	41,493,317
Cost of Issuance Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Deb Capital Improvement Pr					
Reserve Fund Capitalized Interest First Borrowing Debt Second Borrowing Debr Capital Improvement Pr		1	1	1	1
Capitalized Interest First Borrowing Debt Second Borrowing Deb Capital Improvement Pr		1	ı	ı	•
First Borrowing Debt Second Borrowing Deb Capital Improvement Pr		1	1	1	1
Second Borrowing Deb Capital Improvement Pr		5,324,469	5,324,469	5,324,469	5,324,469
Capital Improvement Pr		1,376,108	1,376,108	1,376,108	1,376,108
Capital Improvement Pr					
Capital Improvement Pr					
Capital Improvement Pr					
Annual Balance	rogram	1,069,804	29,888,995	29,650,709	29,225,101
	Total Use	7,770,381	36,589,571	36,351,286	35,925,678
		23,560,511	(1,819,155)	1,794,625	5,567,640
25 Ending Balance		49,456,891	47,637,736	49,432,360	55,000,000

#### Appendix IV - Capacity Fee Calculation Description

#### **Capacity Fee Calculation Description**

The following provides a detailed explanation of the components included in the Capacity Fee analysis. The line numbers refer to the Capacity Fee calculation model presented in Appendix III.

Line 3 is the beginning balance in the Capital Fund.

Line 5 is the projected number of EDUs per year

Line 6 is the calculated charge per EDU using a nonlinear analysis

Line 7 is the result of multiplying line 5 times line 6

Line 8 is the interest on the annual cash balance at an assumed earnings rate of 3%

Line 9 is the amount borrowed in 2006

Line 10 is a second borrowing if needed

Line 12 is the total source of funds-lines 7-11

Line 14 is the soft cost of borrowing or Cost of Issuance, including legal fees, bond insurance rating fees, underwriting, etc.

Line 15 is the debt reserve for the first borrowing anticipated to equal the maximum annual debt service on the bonds.

Line 16 is the capitalized interest. This covers interest on the Bonds for a period of up to [two] years. (If needed)

Line 17 is the annual debt service for the first borrowing

Line 18 is the annual debt service for the second borrowing

Line 22 is the anticipated annual cost of the capital improvement program, adjusted for inflation.

Line 23 is the total use of funds-lines 14-22

Line 24 is the annual balance-Line 12 minus line 23

Line 25 is the ending balance-Line 3 plus line 24