

## ORDINANCE NO. 127

### BEFORE THE BOARD OF DIRECTORS OF DELTA DIABLO

#### **AN ORDINANCE ESTABLISHING CAPITAL FACILITIES CAPACITY CHARGES**

WHEREAS, the Board of Directors of the District has received a management report entitled, "Delta Diablo Capacity Charge Study," dated November 8, 2024, supplemented to incorporate updated Expansion Fund costs, identifying the financial and system facilities needs of the District, and wishes to reaffirm the existing policy of the District of imposing charges when properties either newly connect to the District's system or expand the use of the property previously connected to the system, while also revising the ordinance that authorizes the imposition of these charges to update fees to accurately reflect the District's costs, implement a proportionate fee structure for Capital Facilities Capacity Charges (CFCC) assessment of Accessory Dwelling Units (ADU's), and revise payment timing requirements, consistent with recent changes in regulatory and legal requirements.

The Board of Directors of DELTA DIABLO ordains as follows:

**SECTION 1. SUMMARY.** This Ordinance repeals Sections 2.16.010, 2.16.020, 2.16.050, 2.16.060, 2.16.080, and 2.16.082 of Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges. This Ordinance adds new Sections 2.16.010, 2.16.020, 2.16.050, 2.16.060, 2.16.080, and 2.16.082 (as shown in "Exhibit A," attached) to Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, to provide for Capital Facilities Capacity Charges, and to designate the amounts thereof.

#### **SECTION 2. FINDINGS**

The Board of Directors of Delta Diablo does hereby FIND:

- A. That the Board of Directors has previously, by duly adopted Ordinances, established charges, formerly known commonly as "connection charges" or "development fees", to be paid by all persons obtaining a permit to connect to the District's system as a financial payment to have access to and use of the District's wastewater collection, treatment, and disposal facilities in existence at the time of connecting to the system, and for future facilities to be constructed; and
- B. That the District has undertaken, commencing in 2024, a comprehensive study (attached as "Exhibit B") for the purpose of updating and revising the District's Fees and Charges, necessary to provide the capital facilities for its wastewater system; and
- C. That the District, as a part of the Study, has undertaken a comprehensive evaluation of its operational and financial needs through planned buildout, including a detailed assessment of all types and categories of users; the demands on the system and capacity needs of the system to provide necessary service to the multiple categories of users; the total costs of the existing and future facilities in the system; and methodologies for establishing fair and equitable charges to connect to and gain access to the system; and
- D. That the District's retained consultant submitted its final report of the studies it undertook, entitled, "Delta Diablo Capacity Charges," dated November 8, 2024; and

- E. That the Report has been made available to the public and has been subject to noticed public hearings, all in accordance with the provisions of law, including California Government Code Section 66016; and
- F. That the revenues derived under the provisions of this Ordinance will be used for the acquisition, construction, and reconstruction of the wastewater collection, treatment, and disposal facilities of the District; to repay principal and interest on debt or other financing instruments; or to repay federal or state loans for the construction and reconstruction of said sewerage facilities, together with costs of administration and provisions for necessary reserves; and
- G. That the owners or occupants of properties upon which the fees established by this Ordinance are levied, will discharge wastewater to the District's collection, treatment, and disposal system facilities; that the costs of owning, operating, and maintaining said facilities has constantly increased due in part to increased regulatory requirements to upgrade the treatment process; and that said costs will exceed the amounts of any ad valorem tax revenues or sewer service charges derived from said property; and
- H. That the Capital Facilities Capacity Charges imposed by authority of this Ordinance do not exceed the estimated amount required to provide access to the sewer system facilities and service for which the fee is levied, as provided in California Constitution Article XIID; and
- I. Said Capital Facilities Capacity Charges are required as a financial payment to have access to and use of the District's wastewater collection, conveyance, treatment, and disposal facilities in existence at the time of connecting to the system, and for future facilities to be constructed; and
- J. That the charges adopted by this Ordinance are non-discriminatory, as applied to all users of the system, and are established upon a rational basis between the fees charged each category of property that is connecting, and the cost to the District for the service and facilities provided to connected properties within the District; and
- K. That the adoption of this Ordinance is statutorily exempt under the California Environmental Quality Act from further environmental assessment, pursuant to the provisions of California Public Resources Code Section 21080(b)(8), and 14 California Code of Regulations Section 15273(a); and
- L. That in compliance with California Government Code Section 66016, the proposed Capital Facilities Capacity Charges reflect an equitable and proportionate methodology, including adjustments to account for the impact of Accessory Dwelling Units (ADUs) on the District's facilities. The adopted charges will ensure that fees for ADUs are aligned with the proportional impact these units have on the District's wastewater system, as required by current legislation and local guidelines; and
- M. That the fees established under this Ordinance will be adjusted annually based on changes in the Engineering News-Record Construction Cost Index – San Francisco (ENR-CCI-SF) from December to December, to account for inflation and changes in construction costs. These annual adjustments will ensure that the fees remain aligned with current market conditions and the cost of providing necessary wastewater system improvements and services.

**SECTION 3.** Sections 2.16.010, 2.16.020, 2.16.050, 2.16.060, 2.16.080 and 2.16.082 of Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, are hereby repealed.

SECTION 4. Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.010, Purpose and Scope, is added to read:

**2.16.010 Purpose and Scope**

The purpose of this Chapter is to impose Capital Facilities Capacity Charges when a property is either newly connected to the District's system or the use of a property previously connected to the system is expanded. Revenues derived under the provisions of this Chapter will be used for the acquisition, construction, and reconstruction of the wastewater collection, conveyance, treatment, and disposal facilities of the District; to repay principal and interest on debt instruments; or to repay federal or state loans for the construction and reconstruction of said sewerage facilities, together with costs of administration and provisions for necessary reserves.

SECTION 5. Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.020, Definitions, is added to read:

**2.16.020 Definitions**

- A. "Capital Facilities Capacity Charge", as used in this Chapter, means a one-time, non-discriminatory charge imposed at the time a structure is connected to the District's system, directly or indirectly, or an existing structure or category of use is expanded or increased. Said charge is to pay for District facilities in existence at the time the charge is imposed, or to pay for new facilities to be constructed in the future, that are of benefit to the property being charged.
- B. "Accessory Dwelling Unit," as used in this Chapter, means an attached or detached residential dwelling unit on a lot with a proposed or existing primary residence, as defined by California Government Code, Title 7, Division 1, Chapter 13 and as adopted by local ordinance for each respective District service zone.
- C. "Connection Fee", as used in this Chapter, means a fee equal to the cost necessary to physically connect a building or structure on a parcel of property to the District's system, including but not limited to, installation of meters, meter boxes, structural sewers, lateral sewers, and appurtenances to make the connection, and which fee does not exceed the actual cost of labor, materials, and overhead for the installation of those facilities.
- D. "Equivalent Residential Unit" (or "ERU"), as used in this Chapter, means the typical average wastewater discharge from a single residential unit measured in flow and appropriate discharge constituents, and as determined by the following formula:

Formula: 
$$ERU_s = Q/Q_d * (W_1 + W_2 * (BOD/BOD_d) + W_3 * (TSS/TSS_d) - W_4 * (TDS/TDS_d))$$

Where:  $W_1$  = Weighting Factor for Volume (Flow)

$W_2$  = Weighting Factor for BOD

$W_3$  = Weighting Factor for TSS

$W_4$  = Weighting Factor for TDS

$Q$  = User's Volume (Flow)

$Q_d$  = Volume (Flow) for Equivalent Residential Unit  
 BOD = User's BOD  
 $BOD_d$  = BOD for Equivalent Residential Unit  
 TSS = User's TSS  
 $TSS_d$  = TSS for Equivalent Residential Unit  
 TDS = User's TDS  
 $TDS_d$  = TDS for Equivalent Residential Unit

Note: For Significant Industrial Users (as defined in Chapter 2.28), User's Volume (Q) may be based on maximum hourly flow discharged multiplied by the hours of operation within a calendar day (12:00 am through 11:59 pm).

The following values shall be used for weighting factors:

$W_1$  = 0.742  
 $W_2$  = 0.148  
 $W_3$  = 0.110  
 $W_4$  = 0.000

In calculating the Capital Facilities Capacity Charges, the ratios of User volume and strengths to equivalent residential unit volume and strengths shall not be less than 1.

The following values shall be used for residential unit flows and strengths:

$Q_d$  = 200 gpd  
 $BOD_d$  = 220 mg/l  
 $TSS_d$  = 220 mg/l  
 COD = 400 mg/l  
 $TDS_d$  = 800 mg/l  
 Oil and Grease = 60 mg/l

- E. "Existing Space", as used in this Chapter, is space for which a building permit was issued, all conditions of the building permit were satisfied, and the building permit is closed.
- F. "Minimum Capital Facilities Capacity Charge", as used in this Chapter, means the charge paid by one equivalent residential unit pursuant to the conditions and requirements specified in this Chapter.
- G. "Non-Discriminatory", as used in this Chapter, means that the Capital Facilities Capacity Charge does not exceed an amount determined on the basis of the same objective criteria and methodology applicable to comparable public or non-public Users, and is not in excess of the proportionate share of the cost of the District's facilities of benefit to the person or property being charged, based upon the proportionate share of use of those facilities.
- H. "Public Agency", as used in this Chapter, means the United States or any of its agencies, the state or any of its agencies, The Regents of the University of California, a county, city, district, school district, local or regional public authority, or any other political entity, subdivision, or public corporation of the state.
- I. "Public Sewer", as used in this Chapter means a collector, interceptor, main or trunk sewer owned and operated by the District, a city or other local sewerage agency which is tributary to the

District's sewerage system.

- J. "System", as used in this Chapter, means "Sewerage system", as that term is defined in Section 1.04.010 of this Code, and the existing sewerage treatment systems of the cities of Pittsburg (Zone No. 2) and Antioch (Zone No. 3) benefited by the construction on the District's sewerage treatment plant and main trunk interceptor conveyance facilities.

**SECTION 6.** Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.050, Capital Facilities Capacity Charge, is added to read:

**2.16.050 Capital Facilities Capacity Charge**

- A. Capital Facilities Capacity Charge Required. For each connection proposed to be made for buildings or structures on lands lying within the District (including, but not limited to residential, commercial, industrial, or institutional sewer connections) to the system, there shall be paid that amount, as determined by multiplying the Capital Facilities Capacity Charge by the ERU(s) of the connection (residential, commercial, industrial, or institutional). For each connection, the Capital Facilities Capacity Charge shall be at least the minimum amount as designated in Section 2.16.060 below, except that the Capital Facilities Capacity Charge for multiple dwelling structures, lodging facilities, commercial and industrial sewerage service, commercial trailer parks, and accessory dwelling units shall be as follows:
1. Multiple Dwelling Structures. For multiple dwelling structures, each separate dwelling shall be considered to be an ERU. All fees and charges shall be determined by using the number of dwelling units regardless of buildings and services furnished for the sole use of the multiple dwelling population. Buildings constructed for purposes other than dwelling shall be considered identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the multiple dwelling structure shall be constructed in accordance with District specifications and subject to District inspection, but shall remain as private sewers, subject to private maintenance to the point of connection with the system.
  2. Commercial Sewerage Service. A commercial service is defined as service to a location which sells goods and/or services on a retail or wholesale basis. Commercial services do not typically manufacture commodities. For commercial sewerage service where a sewer will serve one or more identifiable commercial activities, the number of ERU(s) shall be computed separately for each identifiable commercial activity, but in no case shall each fee so computed be less than the minimum Capital Facilities Capacity Charge.
  3. Commercial Trailer (Mobile Home) Parks. For the purposes of this Chapter, each trailer space in a commercial trailer park shall be considered to be an ERU. All fees and charges shall be determined by using the number of trailer spaces regardless of buildings and services furnished for the sole use of the resident trailer population. Buildings constructed for other purposes shall be considered as identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the trailer park shall be constructed in accordance with District specifications and subject to District inspection but shall remain as private sewers subject to private maintenance to the point of connection with the system.
  4. Industrial Sewerage Service. An industrial service is defined as service to a facility that

produces raw materials and/or manufactures commodities or finished goods to be sold by commercial enterprises. For industrial sewerage service, the number of ERU(s) shall be computed for each identifiable commercial activity, but in no case shall each fee so computed be less than the minimum Capital Facilities Capacity Charge, as established by this Code.

5. Lodging Facilities. For lodging facilities, each separate lodging unit shall be considered to be 0.65 of an ERU. All fees and charges shall be determined by using the number of lodging units regardless of buildings and services furnished for the sole use of the lodging facility population. Buildings or other commercial areas of a lodging facility constructed for purposes other than lodging shall be considered identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the lodging facility shall be constructed in accordance with District specifications and subject to District inspection, but shall remain as private sewers, subject to private maintenance to the point of connection with the system.
  6. Accessory Dwelling Units. Each Accessory Dwelling Unit shall be considered to be 0.54 of an ERU for every 1,000 square feet of living space.
    - a. Exemption: Accessory Dwelling Units located within the Existing Space of a single-family dwelling or accessory structure that includes an expansion of not more than 150 square feet are exempt from Capital Facilities Capacity Charges. This exemption does not apply to Accessory Dwelling Units constructed with a new single-family dwelling.
- B. The Capital Facilities Capacity Charge for classifications of Users other than the basic residential unit shall be based upon the ratios of the pertinent constituents and flows multiplied by the basic charge for a residential unit but shall never be less than that basic charge. One or more constituents may be taken into consideration depending upon the impact it may have on the plant process, solids handling and final effluent quality. These constituents may include but are not limited to BOD, suspended solids, total dissolved solids, COD, and oil and grease. When available, calculations will be based upon information provided by the applicant. In other cases, the Engineer shall establish the basis for determining the flow and constituent quantities for each User classification.
- C. In calculating Capital Facilities Capacity Charges, the ERU formula shall be used. Values for flow and constituent strength quantities may be determined by the Engineer for various User classifications using surveys, special studies, predetermined values in the state revenue guidelines, or other data as deemed appropriate.
- D. The Engineer may allow for a flow reduction due to landscaping irrigation, evaporation, and process water usage. At the discretion of the Engineer, a Capital Facility Capacity Charge that is greater than the Minimum Capital Facilities Capacity Charge may be reviewed and adjusted based on the first year's actual water usage. At the Engineer's discretion, there may be subsequent adjustments based on changes in water usage.
- E. Credits and Exemptions.
1. The Capital Facilities Capacity Charges shall not be applicable to connections to the system proposed to be made for lands used, or to be used, as schools by public school Districts.
  2. Except for a ADU is added to a parcel, when a parcel that has been connected to the sewer system undergoes additional development or redevelopment, and a connection permit is

applied for, the following rules shall apply.

- a. No Capital Facilities Capacity Charge shall be payable if the new structure contains less or the same number of ERUs as contained in the old structure.
- b. If a Capital Facilities Capacity Charge previously had been paid to the District, and the new structure contains fewer units than the old structure, no refund shall be payable by the District.
- c. If the new structure contains more units than the old structure, a Capital Facilities Capacity Charge shall be paid only for the additional ERUs constructed, in the amount in effect at the time of payment.
- d. When a structure is remodeled, prior to issuance of a new permit, Capital Facilities Capacity Charges shall be due and payable for all new additional ERUs in the structure.

SECTION 7. Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.060, Capital Facilities Capacity Charge Designated, is added to read:

**Section 2.16.060 Capital Facilities Capacity Charge Designated**

Every person or entity connecting to the District's sewerage system as authorized by Title 2, shall pay the Capital Facilities Capacity Charge based on the location of the property within the following zones:

Zone 1	Bay Point	\$5,471/ERU
Zone 2	Pittsburg	\$4,886/ERU
Zone 3	Antioch	\$4,886/ERU

The minimum charge in any zone will be an amount equal to one ERU, unless indicated otherwise.

SECTION 8. Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.080, Charges Payment Schedule, is added to read:

**2.16.080 Charges Payment Schedule**

Except where otherwise specifically required, or where the Board has approved an alternative schedule for payment of charges in accordance with Government Code section 66007, the charges herein provided for shall be paid on the date of the final inspection, the date the certificate of occupancy is issued, or the date when the building plumbing is connected to the side sewer, whichever occurs first.

SECTION 9. Title 2, Sewer Service System, Chapter 2.16, Capital Facilities Capacity Charges, Section 2.16.082, Requirements for Alternative Payment Schedule, is added to read:

**2.16.082 Requirements for Alternative Payment Schedule**

- A. Pursuant to California Health and Safety Code Section 5474, the District may permit an owner of property to pay Capital Facilities Capacity Charges in installments for up to a three (3) year period when all of the following conditions are met:
  1. The capital facilities capacity will be used on the owner's property;
  2. The amount of the Capital Facilities Capacity Charge exceeds fifty-thousand dollars (\$50,000) per parcel;

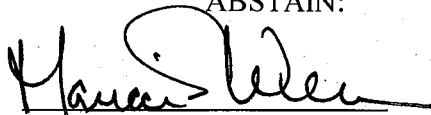
3. The owner has signed the District's Alternative Payment Schedule Agreement; and
  4. The owner has agreed not to file any legal action challenging the amount of the Capital Facilities Capacity Charge or any administrative fee imposed in the Alternative Payment Schedule Agreement.
- B. Payment Schedule. The owner shall pay twenty-five percent (25%) of the total Capital Facilities Capacity Charge and all administrative fees on the date of the final inspection, the date the certificate of occupancy is issued, or the date when the building plumbing is connected to the side sewer, whichever occurs first.. During the three years succeeding this date, the owner shall pay the remaining seventy-five percent (75%) of the total Capital Facilities Capacity Charge plus interest in thirty-six (36) equal monthly installments billed by the District. If the owner desires to pay the Capital Facilities Capacity Charge in fewer than three years from the issuance of the sewer permit, the payment schedule shall be adjusted accordingly.
- C. Interest. Interest shall be charged on the unpaid balance at a rate that is equal to the prime rate at the time the Alternative Payment Schedule Agreement is approved plus one percent, but not to exceed twelve percent (12%) per annum.
- D. Late Payments. The owner's failure to pay any monthly installment when due shall subject the owner to a penalty of ten percent (10%) of the installment payment.
- E. Lien. In addition to other legal remedies the District may have to recover any monies owing under the Alternative Payment Schedule Agreement, as authorized under California Health and Safety Code Section 5474, the District may make the outstanding balance of the Capital Facilities Capacity Charge and the interest thereon a lien against the owner's property to which District's facilities are connected.
- F. Administrative Costs. The owner shall pay an administrative fee to cover the District's costs of administering the Alternative Payment Schedule Agreement in an amount established by the Board of Directors.

**SECTION 10. EFFECTIVE DATE.** This Ordinance becomes effective sixty (60) days after passage, and within fifteen (15) day of passage shall be published once with the names of Directors voting for and against it in the East County Times, a newspaper published in this County and circulated in the District.

PASSED AND ADOPTED on December 11, 2024, by the following vote:

AYES: Banales, Glover, and Wilson  
 NOES:

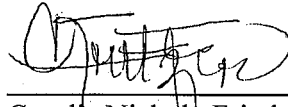
ABSENT:  
 ABSTAIN:



Monica Wilson, Board Chair

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Directors on the date shown.

ATTESTED: December 11, 2024



---

Cecelia Nichols-Fritzler  
Secretary to the Board of Directors

Attachments: Exhibit A – Chapter 2.16 Capital Facilities Capacity Charges  
Exhibit B – 2024 Delta Diablo Capacity Charge Study

## Chapter 2.16 - CAPITAL FACILITIES CAPACITY CHARGES

### 2.16.010 Purpose and Scope

The purpose of this Chapter is to impose Capital Facilities Capacity Charges when a property is either newly connected to the District’s system or the use of a property previously connected to the system is expanded. Revenues derived under the provisions of this Chapter will be used for the acquisition, construction, and reconstruction of the wastewater collection, conveyance, treatment, and disposal facilities of the District; to repay principal and interest on debt instruments; or to repay federal or state loans for the construction and reconstruction of said sewerage facilities, together with costs of administration and provisions for necessary reserves. (Ord. 127 § 4, 2024)

### 2.16.020 Definitions

- A. “Capital Facilities Capacity Charge”, as used in this Chapter, means a one-time, non-discriminatory charge imposed at the time a structure is connected to the District’s system, directly or indirectly, or an existing structure or category of use is expanded or increased. Said charge is to pay for District facilities in existence at the time the charge is imposed, or to pay for new facilities to be constructed in the future, that are of benefit to the property being charged.
- B. “Accessory Dwelling Unit,” as used in this Chapter, means an attached or detached residential dwelling unit on a lot with a proposed or existing primary residence, as defined by California Government Code, Title 7, Division 1, Chapter 13 and as adopted by local ordinance for each respective District service zone.
- C. “Connection Fee”, as used in this Chapter, means a fee equal to the cost necessary to physically connect a building or structure on a parcel of property to the District’s system, including but not limited to, installation of meters, meter boxes, structural sewers, lateral sewers, and appurtenances to make the connection, and which fee does not exceed the actual cost of labor, materials, and overhead for the installation of those facilities.
- D. “Equivalent Residential Unit” (or “ERU”), as used in this Chapter, means the typical average wastewater discharge from a single residential unit measured in flow and appropriate discharge constituents, and as determined by the following formula:

Formula: 
$$ERU_s = Q/Q_d * (W_1 + W_2 * (BOD/BOD_d) + W_3 * (TSS/TSS_d) - W_4 * (TDS/TDS_d))$$

- Where:  $W_1$  = Weighting Factor for Volume (Flow)
- $W_2$  = Weighting Factor for BOD
- $W_3$  = Weighting Factor for TSS
- $W_4$  = Weighting Factor for TDS
- $Q$  = User’s Volume (Flow)
- $Q_d$  = Volume (Flow) for Equivalent Residential Unit
- BOD = User’s BOD
- $BOD_d$  = BOD for Equivalent Residential Unit
- TSS = User’s TSS
- $TSS_d$  = TSS for Equivalent Residential Unit
- TDS = User’s TDS
- $TDS_d$  = TDS for Equivalent Residential Unit

Note: For Significant Industrial Users (as defined in Chapter 2.28), User’s Volume (Q) may be based

on maximum hourly flow discharged multiplied by the hours of operation within a calendar day (12:00 am through 11:59 pm).

The following values shall be used for weighting factors:

W <sub>1</sub>	=	0.742
W <sub>2</sub>	=	0.148
W <sub>3</sub>	=	0.110
W <sub>4</sub>	=	0.000

In calculating the Capital Facilities Capacity Charges, the ratios of User volume and strengths to equivalent residential unit volume and strengths shall not be less than 1.

The following values shall be used for residential unit flows and strengths:

Q <sub>d</sub>	=	200 gpd
BOD <sub>d</sub>	=	220 mg/l
TSS <sub>d</sub>	=	220 mg/l
COD	=	400 mg/l
TDS <sub>d</sub>	=	800 mg/l
Oil and Grease	=	60 mg/l

- E. "Existing Space", as used in this Chapter, is space for which a building permit was issued, all conditions of the building permit were satisfied, and the building permit is closed.
- F. "Minimum Capital Facilities Capacity Charge", as used in this Chapter, means the charge paid by one equivalent residential unit pursuant to the conditions and requirements specified in this Chapter.
- G. "Non-Discriminatory", as used in this Chapter, means that the Capital Facilities Capacity Charge does not exceed an amount determined on the basis of the same objective criteria and methodology applicable to comparable public or non-public Users, and is not in excess of the proportionate share of the cost of the District's facilities of benefit to the person or property being charged, based upon the proportionate share of use of those facilities.
- H. "Public Agency", as used in this Chapter, means the United States or any of its agencies, the state or any of its agencies, The Regents of the University of California, a county, city, district, school district, local or regional public authority, or any other political entity, subdivision, or public corporation of the state.
- I. "Public Sewer", as used in this Chapter means a collector, interceptor, main or trunk sewer owned and operated by the District, a city or other local sewerage agency which is tributary to the District's sewerage system.
- J. "System", as used in this Chapter, means "Sewerage system", as that term is defined in Section 1.04.010 of this Code, and the existing sewerage treatment systems of the cities of Pittsburg (Zone No. 2) and Antioch (Zone No. 3) benefited by the construction on the District's sewerage treatment plant and main trunk interceptor conveyance facilities.

#### **2.16.030 Permit, Plan Checking, and Inspection Fees**

- A. Permit, plan checking, and inspection fees, as established by this Code, shall be paid upon application for sewerage service.

- B. If the applicant applies for a rebate within fifteen (15) days of the inspection for which a house lateral inspection fee was paid, the District shall pay a rebate of Five Dollars (\$5.00) for each house lateral inspection performed, provided that the applicant demonstrates to the District's satisfaction, that more than four (4) inspections were performed by District personnel during the same site visit. The amount of rebate shall be increased to Ten Dollars (\$10.00) per inspection if ten (10) or more inspections are made during the same site visit.
- C. For the purpose of calculating the inspection fee for sewer facilities other than house laterals, main laterals, and gravity sewer mains, the applicant shall submit to the District a copy of the contractor's bid to perform the work. (Ord. 75 § 4, 2002)

**2.16.040 Permit, Plan Checking, and Inspection Fees Designated**

A. <u>Plan Check Fee</u>	
1. Initial Review	\$250.00
2. Subsequent Plan Check Fees (Per Check)	\$50.00
B. <u>Inspection Fees</u>	
1. Permit Fee	\$50.00
2. Sanitary Sewer	
a. Lateral or Side sewer	\$100.00
b. Trunk and Main Sewer	
i. Installation	
a) Minimum (fee for up to 300 feet)	\$50.00
b) Per foot (for each foot over 300 feet)	\$0.20
ii. TV Inspection	
a) Minimum (fee for up to 300 feet)	\$500.00
b) Per foot (for each foot over 300 feet)	\$0.80
c. Mobile Home in Park	\$25.00
d. Facilities not included above	7.5% of Construction Costs (Ord. 75 § 4, 2002)

**2.16.050 Capital Facilities Capacity Charge**

- A. Capital Facilities Capacity Charge Required. For each connection proposed to be made for buildings or structures on lands lying within the District (including, but not limited to residential, commercial, industrial, or institutional sewer connections) to the system, there shall be paid that amount, as determined by multiplying the Capital Facilities Capacity Charge by the ERU(s) of the connection (residential, commercial, industrial, or institutional). For each connection, the Capital Facilities Capacity Charge shall be at least the minimum amount as designated in Section 2.16.060 below, except that the Capital Facilities Capacity Charge for multiple dwelling structures, lodging facilities, commercial and industrial sewerage service, commercial trailer parks, and accessory dwelling units shall be as follows:
  - 1. Multiple Dwelling Structures. For multiple dwelling structures, each separate dwelling shall be considered to be an ERU. All fees and charges shall be determined by using the

number of dwelling units regardless of buildings and services furnished for the sole use of the multiple dwelling population. Buildings constructed for purposes other than dwelling shall be considered identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the multiple dwelling structure shall be constructed in accordance with District specifications and subject to District inspection, but shall remain as private sewers, subject to private maintenance to the point of connection with the system.

2. Commercial Sewerage Service. A commercial service is defined as service to a location which sells goods and/or services on a retail or wholesale basis. Commercial services do not typically manufacture commodities. For commercial sewerage service where a sewer will serve one or more identifiable commercial activities, the number of ERU(s) shall be computed separately for each identifiable commercial activity, but in no case shall each fee so computed be less than the minimum Capital Facilities Capacity Charge.
3. Commercial Trailer (Mobile Home) Parks. For the purposes of this Chapter, each trailer space in a commercial trailer park shall be considered to be an ERU. All fees and charges shall be determined by using the number of trailer spaces regardless of buildings and services furnished for the sole use of the resident trailer population. Buildings constructed for other purposes shall be considered as identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the trailer park shall be constructed in accordance with District specifications and subject to District inspection, but shall remain as private sewers subject to private maintenance to the point of connection with the system.
4. Industrial Sewerage Service. An industrial service is defined as service to a facility that produces raw materials and/or manufactures commodities or finished goods to be sold by commercial enterprises. For industrial sewerage service, the number of ERU(s) shall be computed for each identifiable commercial activity, but in no case shall each fee so computed be less than the minimum Capital Facilities Capacity Charge, as established by this Code.
5. Lodging Facilities. For lodging facilities, each separate lodging unit shall be considered to be 0.65 of an ERU. All fees and charges shall be determined by using the number of lodging units regardless of buildings and services furnished for the sole use of the lodging facility population. Buildings or other commercial areas of a lodging facility constructed for purposes other than lodging shall be considered identifiable commercial activities, and the fees and charges shall be determined accordingly. All sewers within the property lines of the lodging facility shall be constructed in accordance with District specifications and subject to District inspection, but shall remain as private sewers, subject to private maintenance to the point of connection with the system.
6. Accessory Dwelling Units. Each Accessory Dwelling Unit shall be considered to be 0.54 of an ERU for every 1,000 square feet of living space.
  - a. Exemption: Accessory Dwelling Units located within the Existing Space of a single-family dwelling or accessory structure that includes an expansion of not more than 150 square feet are exempt from Capital Facilities Capacity Charges. This exemption does not apply to Accessory Dwelling Units constructed with a new single-family dwelling.

- B. The Capital Facilities Capacity Charge for classifications of Users other than the basic residential unit shall be based upon the ratios of the pertinent constituents and flows multiplied by the basic charge for a residential unit but shall never be less than that basic charge. One or more constituents may be taken into consideration depending upon the impact it may have on the plant process, solids handling and final effluent quality. These constituents may include but are not limited to BOD, suspended solids, total dissolved solids, COD, and oil and grease. When available, calculations will be based upon information provided by the applicant. In other cases, the Engineer shall establish the basis for determining the flow and constituent quantities for each User classification.
- C. In calculating Capital Facilities Capacity Charges, the ERU formula shall be used. Values for flow and constituent strength quantities may be determined by the Engineer for various User classifications using surveys, special studies, predetermined values in the state revenue guidelines, or other data as deemed appropriate.
- D. The Engineer may allow for a flow reduction due to landscaping irrigation, evaporation, and process water usage. At the discretion of the Engineer, a Capital Facility Capacity Charge that is greater than the Minimum Capital Facilities Capacity Charge may be reviewed and adjusted based on the first year's actual water usage. At the Engineer's discretion, there may be subsequent adjustments based on changes in water usage. (Ord. 127 § 4, 2024)
- E. Credits and Exemptions.
  - 1. The Capital Facilities Capacity Charges shall not be applicable to connections to the system proposed to be made for lands used, or to be used, as schools by public school Districts.
  - 2. Except for a ADU is added to a parcel, when a parcel that has been connected to the sewer system undergoes additional development or redevelopment, and a connection permit is applied for, the following rules shall apply.
    - a. No Capital Facilities Capacity Charge shall be payable if the new structure contains less or the same number of ERUs as contained in the old structure.
    - b. If a Capital Facilities Capacity Charge previously had been paid to the District, and the new structure contains fewer units than the old structure, no refund shall be payable by the District.
    - c. If the new structure contains more units than the old structure, a Capital Facilities Capacity Charge shall be paid only for the additional ERUs constructed, in the amount in effect at the time of payment.
    - d. When a structure is remodeled, prior to issuance of a new permit, Capital Facilities Capacity Charges shall be due and payable for all new additional ERUs in the structure.

**2.16.060 Capital Facilities Capacity Charge Designated**

Every person or entity connecting to the District's sewerage system as authorized by Title 2, shall pay the Capital Facilities Capacity Charge based on the location of the property within the following zones:

Zone 1	Bay Point	\$5,471/ERU
Zone 2	Pittsburg	\$4,886/ERU
Zone 3	Antioch	\$4,886/ERU

The minimum charge in any zone will be an amount equal to one ERU, unless indicated otherwise.

(Ord. 127 § 4, 2024))

### **2.16.072 Temporary Connections**

- A. A temporary connection is defined as a connection to the District's sewerage system for less than one (1) year. Such connections add wear and tear to the system and will be assessed a temporary connection charge for the period of connection to the system based on the peak volume of flows and the zone where the temporary connection is served. Such temporary connections may be less than the minimum charge of one ERU. The basis of computation of the temporary connection charge for capacity rental shall be based on that connection's share of interest on debt service used for system expansion as determined by the Manager. (Ord. 94 § 2, 2010)
- B. Should a connection originally determined to be temporary remain connected to the system for more than one (1) year, that connection will be deemed a permanent connection subject to the Capital Facilities Capacity Charge for the zone in which the connection is served. Prior connection charge payments for temporary service will be credited as payment toward the permanent connections Capital Facilities Capacity Charge. (Ord. 94 § 2, 2010)

### **2.16.080 Charges Payment Schedule**

Except where otherwise specifically required, or where the Board has approved an alternative schedule for payment of charges in accordance with Government Code section 66007, the charges herein provided for shall be paid on the date of the final inspection, the date the certificate of occupancy is issued, or the date when the building plumbing is connected to the side sewer, whichever occurs first. (Ord. 127 § 4, 2024))

### **2.16.082 Requirements for Alternative Payment Schedule**

- A. Pursuant to California Health and Safety Code Section 5474, the District may permit an owner of property to pay Capital Facilities Capacity Charges in installments for up to a three (3) year period when all of the following conditions are met:
1. The capital facilities capacity will be used on the owner's property;
  2. The amount of the Capital Facilities Capacity Charge exceeds fifty-thousand dollars (\$50,000) per parcel;
  3. The owner has signed the District's Alternative Payment Schedule Agreement; and
  4. The owner has agreed not to file any legal action challenging the amount of the Capital Facilities Capacity Charge or any administrative fee imposed in the Alternative Payment Schedule Agreement.
- B. Payment Schedule. The owner shall pay twenty-five percent (25%) of the total Capital Facilities Capacity Charge and all administrative fees on the date of the final inspection, the date the certificate of occupancy is issued, or the date when the building plumbing is connected to the side sewer, whichever occurs first. During the three years succeeding this date, the owner shall pay the remaining seventy-five percent (75%) of the total Capital Facilities Capacity Charge plus interest in thirty-six (36) equal monthly installments billed by the District. If the owner desires to pay the Capital Facilities Capacity Charge in fewer than three years from the issuance of the sewer permit, the payment schedule shall be adjusted accordingly

- C. Interest. Interest shall be charged on the unpaid balance at a rate that is equal to the prime rate at the time the Alternative Payment Schedule Agreement is approved plus one percent, but not to exceed twelve percent (12%) per annum.
- D. Late Payments. The owner's failure to pay any monthly installment when due shall subject the owner to a penalty of ten percent (10%) of the installment payment.
- E. Lien. In addition to other legal remedies the District may have to recover any monies owing under the Alternative Payment Schedule Agreement, as authorized under California Health and Safety Code Section 5474, the District may make the outstanding balance of the Capital Facilities Capacity Charge and the interest thereon a lien against the owner's property to which District's facilities are connected.
- F. Administrative Costs. The owner shall pay an administrative fee to cover the District's costs of administering the Alternative Payment Schedule Agreement in an amount established by the Board of Directors. (Ord. 127 § 4, 2024))

#### **2.16.090 Separate Connection for Each Premise – Exception**

There shall be a separate connection to the District's sewerage system for each structure, building, identifiable commercial activity, or separate premises; except that upon written request to, and approval by the Engineer, any two (2) or more separate structures, buildings, or identifiable commercial activities, on the same lot, under a single ownership of record, may be connected to the system by means of a single connection to serve such structures, buildings, identifiable commercial activities, or separate premises; in which case a Capital Facilities Capacity Charge shall be levied, and which charge shall be the total of the applicable fees and charges, as set forth in this Chapter for each structure, building, identifiable commercial activity, or separate premises, and the responsibility for payment of fees and charges for all facilities and services furnished shall be assumed by the owner. Under this option of connection, the connecting sewer shall remain a private sewer unless constructed as a main sewer, and upon District's acceptance, deeded or dedicated to the District. (Ord. 75 § 4, 2002)

#### **2.16.100 Change of Use**

Where Capital Facilities Capacity Charges have previously been paid for sewerage service for a structure, building, identifiable commercial activity, or separate premises, and it is proposed to alter the original character or use for the structure, building, identifiable commercial activity, industrial, or institutional activity, or separate premises, the Engineer may establish and collect Capital Facilities Capacity Charges at the current rate in affect at the time of payment for the new proposed use, giving credit for the ERU previously used for the calculation of previous charges paid to the District. (Ord. 75 § 4, 2002)

#### **2.16.110 Appeals of Determinations**

Any person or owner who has a right to appeal, as provided in any Section of the Code, or who is dissatisfied with any determination made pursuant to this Chapter by the Engineer or any other District officer, may appeal the determination as defined by Section 1.12.010 Appeal Process. (Ord. 94 § 2, 2010)

#### **2.16.120 Capital Facilities Capacity Charges and Inspection Fees– Refunds**

The District shall refund a Capital Facilities Capacity Charge or inspection fee paid in accordance

with Sections 2.16.060 and 2.16.040 if all the following conditions are satisfied:

- A. No construction has occurred on the parcel.
- B. A request for refund is made to the District within twelve (12) months after the date the connection/permit receipt was issued.
- C. The original connection/permit receipt and sewer permit, if applicable, is returned to the District.
- D. The District has obtained confirmation from the appropriate jurisdiction (county or city) that any action taken by that jurisdiction based on the connection/permit receipt and sewer permit, if applicable, is being reversed. (Ord. 75 § 4, 2002)

**2.16.130 Transfer of Capital Facilities Capacity – Property Subject to Public Project**

Where capital facilities capacity has been established for a property through the owner's payment of Capital Facilities Capacity Charges, and the ability to use the capacity for the property has been permanently reduced or eliminated due to a public entity's project on the property, the property owner may request a transfer of the property's capital facilities capacity to a new property, if the owner will use the new property for the same use as the original property. Such a request must be made within twelve (12) months of the time that either a final order of condemnation of the original property is recorded or a deed conveying the property owner's interest in the original property to the condemning agency is recorded. To qualify for a transfer, the property owner shall provide the District a certified copy of either the final order of condemnation of the original property or the recorded deed conveying the property owner's interest in the original property to the condemning agency. The property owner shall also provide documentation from the public entity establishing that the public entity did not compensate the property owner in any way for the loss of capital facilities capacity at the original property. (Ord. 82, § 2, 2004)

**2.16.132 Limited Transfer of Capital Facilities Capacity – Private Purposes**

- A. Where capital facilities capacity has been established for a property, the capacity reserved for that property is not transferable to another property except as provided in Section 2.16.130 and in this Section.
- B. Where:
  - 1. A property owner has operated an identifiable commercial activity as defined in Section 1.04.010 of the Code on his/her property located in the District; and
  - 2. Capital facilities capacity has been established for that property through either the current or a previous property owner's payment of Capital Facilities Capacity Charges; and
  - 3. The property owner has submitted a written application for transfer of the capacity and made a monetary deposit in the amount estimated by the Manager to pay all expenses for a special study, to be planned and performed by the District or its consultant to determine any impact on District facilities caused by the transfer; and
  - 4. The owner ceases operation of the identifiable commercial activity at that property; and
  - 5. The owner relocates the entire activity to another property within the District and will use the new property for the same use as the original property; the owner may request a

transfer of the capital facilities capacity reserved for the original property to the new property.

- C. The request for a transfer of capacity may be granted if all the following conditions are met.
1. The owner has paid all costs to the District associated with the transfer of capacity, including the cost of the study to determine any impact on District facilities caused by the transfer; the costs of any such impact as determined by the District and based on the study; and any costs to administer the transfer; and
  2. The owner has paid the current Capital Facilities Capacity Charge for any additional capacity required at the new property; and
  3. Should the transfer of capacity be into a District zone with a higher Capital Facilities Capacity Charge than the zone of the original property, the owner has paid the incremental increase between the capacity charges. Should the transfer be to a zone with a lower or equal capacity charge, no additional charges will be paid by the owner, and no refund will be made by the District; and
  4. If the owner retains ownership of the original property, the owner has placed a deed restriction on its title indicating the amount of sewer capacity available for the property and that any additional capacity must be purchased at the rate of the Capital Facilities Capacity Charges in effect at the time of transfer of title for the property to the new owner; and
  5. The owner has agreed not to file any legal action challenging the Capital Facilities Capacity Charge, or any other costs the owner is required to pay to obtain the transfer; and
  6. The owner has signed a contract for the transfer of capacity consistent with the requirements of this Section. (Ord. 84, § 3, 2005)

November 8, 2024

*Delta Diablo Capacity Charge Study*



IB Consulting, LLC  
31938 Temecula Parkway, Suite A #350  
Temecula, CA. 92592

## TABLE OF CONTENTS

Executive Summary .....	3
Overview .....	4
Capacity Charge Methodology .....	5
Capacity Charge Analysis .....	8
Updated Capacity Charges .....	15
Appendix A – Asset Listing .....	16
Appendix B – Debt Schedules .....	17

## TABLES

Table 1 – Asset Summary .....	8
Table 2 – Capital-Related Reserves .....	9
Table 3 – Outstanding Principal .....	10
Table 4 – NPV of Outstanding Interest .....	10
Table 5 – Asset Value Adjustments .....	11
Table 6 – Wastewater System .....	12
Table 7 – Asset Unit Rate (\$ per ERU) .....	13
Table 8 – Adjustments (\$ per ERU) .....	13
Table 9 – Buy-In Calculation (\$ per ERU) .....	14
Table 10 – Incremental Costs .....	14
Table 11 – Incremental-Cost Component (\$ per ERU) .....	14
Table 12 – Capacity Charge Summary .....	15
Table 15 – Debt Schedules FY 2025 to FY 2034 .....	17
Table 16 – Debt Schedules FY 2035 to FY 2044 .....	18
Table 17 – Debt Schedules FY 2045 to FY 2053 .....	19

## FIGURES

Figure 1 – Capacity Charge Analysis .....	5
Figure 2 – Buy-In Component .....	6
Figure 3 – Formula for Incremental-Cost Approach .....	6

## Executive Summary

---

Delta Diablo (District) engaged IB Consulting to update its capacity charges. This Capacity Charge Study Report (Report) describes the approach, methodology, and technical analysis used to derive updated capacity charges per California State Government Code, Section 66013 (GC 66013). GC 66013 allows an agency to charge the estimated reasonable infrastructure cost to serve a new connection for which the charge is imposed.

The existing wastewater capacity charge varies by three service areas (or Zones) and is \$3,940 for Bay Point (Zone 1), \$4,358 for Pittsburg (Zone 2), and \$5,033 for Antioch (Zone 3). These fees are for one Equivalent Residential Unit (1 ERU)<sup>1</sup>, reflecting the wastewater facility design requirements of 200 daily gallons of sewer discharge. The strength loading factors for a Residential ERU are 220 mg/L (milligrams per liter) for both Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS), and 400 mg/L for Chemical Oxygen Demand (COD). Based on our analysis, the updated wastewater capacity charge is **\$5,471** per ERU for Bay Point (Zone 1) and **\$4,886** per ERU for both Pittsburg (Zone 2) and Antioch (Zone 3). The updated fees recover each new connection's proportionate share of treatment facility costs, plus a proportional share of collection facilities costs for Bay Point connections.

### Annual Capacity Charge Adjustment

IB Consulting recommends adjusting the capacity charge annually to keep pace with inflation by applying the San Francisco Engineering News-Record Construction Cost Index (SF ENR - CCI). The District should also review its capacity charges every five years, in conjunction with its master plan updates, to capture any significant changes and ensure capacity charges remain equitable.

---

<sup>1</sup> 1 ERU = 200 gallons of flow per day, BOD = 220 mg/L, TSS = 220 mg/L, and COD = 400 mg/L

## Overview

---

### District Background

Located in Contra Costa County, the District provides wastewater treatment services for about 218,000 customers in the cities of Antioch and Pittsburg, and the unincorporated community of Bay Point. The District treats approximately 14.2 million gallons per day (MGD) of wastewater and produces 7.7 MGD of recycled water daily. Pittsburg (Zone 2) and Antioch (Zone 3) only pay for the District's Conveyance and Wastewater Treatment Plant (WWTP), as the collection systems for those service areas are owned and operated by each respective City. However, the collection system for Bay Point (Zone 1) is owned and operated by the District and new connections in Bay Point pay a proportional share of the collection system.

As part of the District's financial plan and rate update, the capacity charges are being reviewed and updated to ensure new system users or existing users requiring increased system capacity pay their fair share of the costs associated with the wastewater facilities required to serve them.

### Capacity Charge

A "Capacity Charge" is defined as a charge for public facilities in existence when a charge is imposed or for new facilities to be constructed in the future that benefit the person or property being charged. Capacity charges ensure new development or existing users requiring increased system capacity pay their fair share of the costs associated with the facilities.

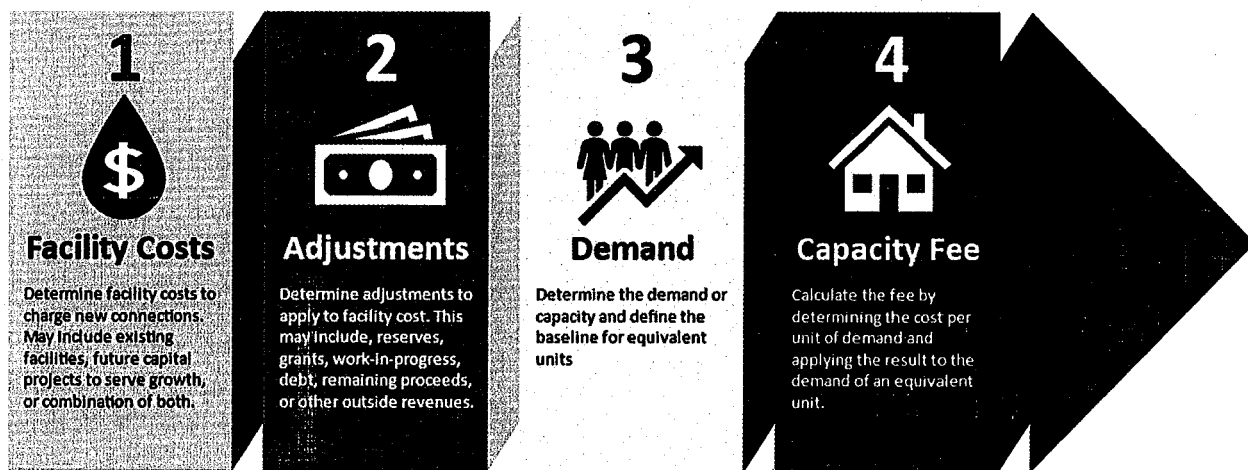
Based on the requirements of GC 66013, capacity charges must be based on the "*reasonable cost*" to accommodate additional demand from new development or the expansion of existing connections. In addition, Proposition 26 amended the State Constitution in 2010, which redefined a "tax" as any levy, charge, or exaction of any kind imposed by a local government. However, there were seven exemptions within Proposition 26, including cost-based charges imposed for providing a service (i.e., capacity charges) so long as such fees do not exceed the cost of providing the service. Therefore, the study summarized in this Report connects the costs of facilities, the capacity of the wastewater system, the increased capacity gained from any expansions, and the updated proposed fees in compliance with the Proposition 26 exemption.

Government Code section 66016.6 requires that prior to levying a new fee or capacity charge, the District evaluate the amount of the fee or capacity charge. The evaluation shall include evidence to support that the fee or capacity charge does not exceed the estimated reasonable cost of providing service, in accordance with Section 66013. This Report meets the requirements of Government Code section 66016.6.

## Capacity Charge Methodology

There are four primary steps in calculating capacity charges: (1) determine the cost of facilities and assets recoverable through capacity charges, (2) incorporate any credits or adjustments to apply towards the total infrastructure costs such as grants, existing debt obligations, unspent debt proceeds, and available funding through previously collected capacity charges, (3) identify demand or capacity related to the facilities and define the baseline requirements for a connection or equivalent dwelling unit based on planning documents, and (4) apportion the net infrastructure costs equitably to various types of connections based on the demand placed on the utility system.

Figure 1 – Capacity Charge Analysis



In addition to the four steps above, there are two primary approaches for calculating capacity charges: the "Buy-In Method" and "Incremental-Cost Method." Selecting the best method depends on the unique circumstances of the utility, existing facilities funded in advance of development, current and future capacity planned to be built in the system, available funding, whether future facilities will be debt-financed, expected future growth, and access to up-to-date planning documents/master plans. Careful consideration may be required to allocate costs between existing and new customers and ensure no duplication of costs.

### Buy-In Method

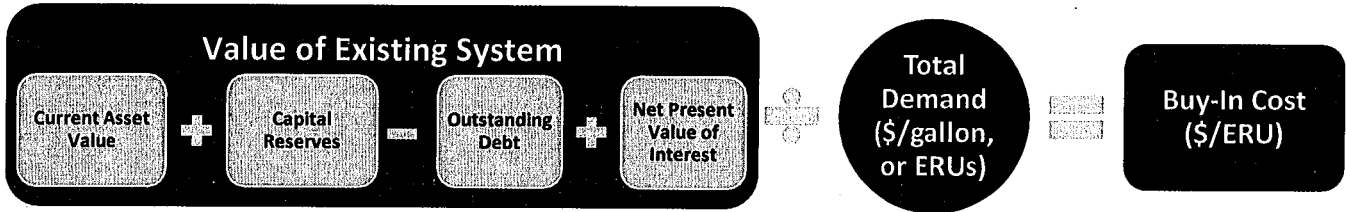
The basis of the Buy-In Method is to pay for existing facilities funded in advance of growth. This approach ensures new development and expanded connections buy into the utility system's existing facilities. The Buy-In method eliminates any potential funding of existing system deficiencies as the District's current asset inventory only reflects improvements to the system today.

Once the system value is determined, dividing the total value by the total available capacity derives the buy-in cost per ERU. Demand is commonly used for system design and planning. It is a primary driver for the system's current configuration and how it expands in the future. Demand is measured in gallons per day (gpd) for the wastewater treatment plant capacity and a cost per gallon of capacity is derived. The cost per gallon is multiplied by the daily flow represented by one ERU (the District utilizes 200 gallons per day for facility design) to determine the amount per ERU. Assignment of ERUs to a developing parcel will vary based on land use type, projected wastewater flows, and strength loadings. Therefore, non-residential connections may

# Delta Diablo – Capacity Charge Study

be assigned additional ERUs based on the type and strength of the expected discharge from the new connection. Figure 2 shows the framework for calculating the amount related to the buy-in component.

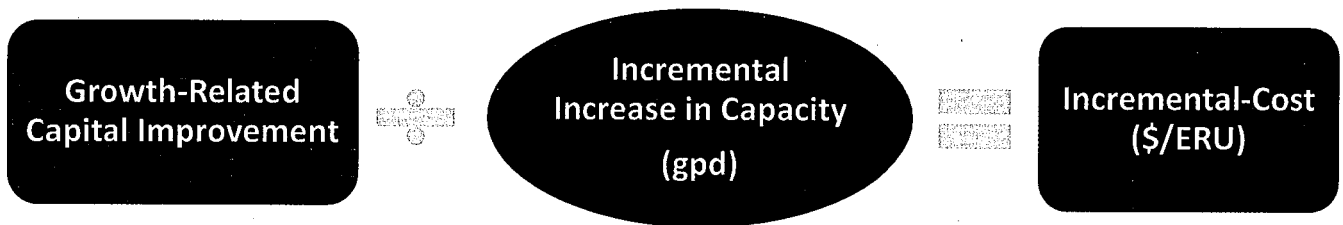
Figure 2 – Buy-In Component



## Incremental-Cost Method

The Incremental-Cost Method is based on the principle that new development should pay for improvements required to connect them to the system, including the need for any additional capacity and/or expansions. This approach is typically used when specific capital improvements are identified within planning documents and required for growth. Projects associated with routine repair & replacement and Master Plan improvements required to address existing deficiencies (*not deficiencies to accommodate growth*) are excluded. Also, specific projects within the Master Plan may benefit existing and new development. In these instances, new development only pays its proportionate share based on the demand or capacity taken from these projects. Under the Incremental-Cost Method, growth-related capital improvements are allocated to new development based on their capacity requirements. Demand is measured in gpd and a cost per gallon of capacity is derived. The cost per gallon is multiplied by the daily flow represented by one ERU to determine the incremental cost per ERU. Figure 3 shows the framework for calculating capacity charges using the incremental cost component.

Figure 3 – Formula for Incremental-Cost Approach



# Delta Diablo – *Capacity Charge Study*

---

## Hybrid Method

When there is both a buy-in component and incremental-cost component used to update capacity charges, the approach is commonly referred to as the Hybrid Method. The Hybrid Approach is utilized when the existing system has available capacity and/or is substantially built while specific capital improvements within planning documents are clearly identified and solely needed to serve new development. ***For this study, the updated wastewater capacity charges are based on the Hybrid Method.***

## Capacity Charge Analysis

### Step 1 – Asset Valuation (RCLD Asset Value)

This study utilizes the Replacement Cost Less Depreciation (RCLD) method of valuing the system. RCLD valuation is the most equitable and reasonable approach since it considers the time value of money and factors in the remaining useful life of each asset. To accomplish this, the District provided fixed asset records containing the original cost of each asset. Replacement costs were estimated by bringing forward the original costs to today's dollars to reflect the estimated cost if a similar asset were constructed today.

The original cost of each asset was indexed by the annual percentage change of the SF ENR - CCI, published by the Engineering News-Record. For 2024 (year to date through October), the SF ENR – CCI value is 15,425. Accumulated depreciation was also indexed to maintain consistency with 2024 dollars. Subtracting the accumulated depreciation from the replacement cost yields the updated RCLD and reflects service standards in 2024 dollars. Table 1 summarizes the wastewater assets by category and shows the original cost (OC), accumulated depreciation, replacement cost in 2024 dollars, accumulated depreciation in 2024 dollars, and assets adjusted for the 2024 depreciation (RCLD). Land values were not depreciated, and the replacement value is estimated by increasing the original acquisition costs by a 2% inflation limit in-line with Proposition 13 constraints on assessed values. A detailed listing of wastewater assets can be found in Appendix A.

Table 1 – Asset Summary

Asset Summary					
Asset Categories	OC	Accumulated Depreciation	Replacement Cost (2024 \$)	RC Accumulated Depreciation (2024 \$)	RCLD (2024 \$)
	[A]	[B]	[C]	[D]	[E] = C-D
Bay Point Collection	\$6,760,048	\$1,128,295	\$9,096,508	\$1,819,988	\$7,276,521
Land	\$3,771,104	\$0	\$4,320,035	\$0	\$4,320,035
Plant Conveyance	\$27,460,089	\$16,222,638	\$61,378,180	\$39,776,119	\$21,602,061
Storage & Pumping	\$50,925,691	\$23,810,656	\$100,713,108	\$56,224,067	\$44,489,041
Treatment	\$126,193,291	\$76,418,097	\$258,516,399	\$190,842,630	\$67,673,768
Equipment	\$13,467,966	\$9,917,856	\$21,694,266	\$17,264,154	\$4,430,112
General Admin	\$17,494,831	\$11,345,809	\$35,976,199	\$24,863,127	\$11,113,071
<b>Total Assets</b>	<b>\$246,073,021</b>	<b>\$138,843,351</b>	<b>\$491,694,695</b>	<b>\$330,790,085</b>	<b>\$160,904,610</b>

# Delta Diablo – Capacity Charge Study

## Step 2 - Asset Adjustments

It is also important to identify any adjustments to the RCLD total asset value. Special consideration may be required when assets are acquired through debt financing, contributed by developers, and grant funding. For this study, the adjustments impacting the asset valuation are separated into three components:

**Capital Reserves:** Includes reserves that provide funding for system improvements, which increases the asset values of the corresponding category. It is reasonable and appropriate to include the balance of the capital-related reserves because they have been built up over time by existing rate customers and will be used to repair or replace aging infrastructure, thereby contributing to the value of the system. Capital reserves will **increase** the system's value as the cash equivalents are available for capital spending. However, previously collected capacity charges (WW Expansion) that have not yet been spent are applied as a credit towards the system asset value. Table 2 identifies the FY 2025 beginning reserve balances for the District.

Table 2 – Capital-Related Reserves

Capital-Related Reserves	
Description	Included Capital-Related Reserves
(+) Capital Asset Fund	\$3,542,999
(+) Advanced Treatment Fund	\$21,073,154
(+) Capital Asset Replacement Fund	\$40,492,969
(+) Bay Point - Collections	\$2,555,289
(-) WW Expansion	(\$15,773,313)
<b>Total Capital-Related Reserves</b>	<b>\$51,891,098</b>

**Outstanding Principal:** Remaining outstanding principal payments of existing bonds and loans. Debt obligations that are funded by sewer rates (Sewer Service Charges or SSCs) reduce the RCLD asset value because the principal must be paid off for the District to realize the RCLD value. Table 3 identifies the amount of outstanding principal remaining for the existing debt for the wastewater system, with FY 2025 as the starting point. For the 2016 "SRF Loan – PB Force Main Improvement," the debt was apportioned between sewer service charges (i.e., rates) and capacity charges because the improvement provided additional capacity for growth; 75% of the cost is secured by SSCs, and 25% of the cost is secured by capacity charges. The 75% of the outstanding principal associated with SSCs are included in Table 3 since new connections will be paying this portion of the debt through rates. Detailed wastewater debt schedules are in Appendix B.

# Delta Diablo – Capacity Charge Study

Table 3 – Outstanding Principal

Outstanding Principal			
Description	Value (\$)	Include ?	Included Outstanding Principal
2011 SRF Loan - Aeration Basin Imp Project	\$2,589,124	Yes	(\$2,589,124)
2015 CEC Loan - FOG Receiving Facility	\$262,306	Yes	(\$262,306)
2016 SRF Loan - PB Force Main Imp (SSCs)	\$7,123,311	Yes	(\$7,123,311)
2016 SRF Loan - PB Force Main Imp (CFCC)	\$2,291,158	No	\$0
2011 Municipal Finance Corp Loan - Solar Project	\$989,993	Yes	(\$989,993)
2015 SRF Loan - BP Pipeline Repair	\$887,947	Yes	(\$887,947)
2016 SRF Loan - BP Pipeline Repair	\$1,619,839	Yes	(\$1,619,839)
2014 SRF Loan - BP 2017 Pipeline Repair	\$2,956,392	Yes	(\$2,956,392)
2014 SRF Loan Pump Station Facilities Repair	\$11,519,975	Yes	(\$11,519,975)
<b>Total Outstanding Principal</b>	<b>\$30,240,045</b>		<b>(\$27,948,888)</b>

**Outstanding Interest:** The PB Force Main Improvement included debt financing as a funding source with 25% of the debt secured by capacity charges. The 25% of debt secured by capacity charges must recover the future interest payments through maturity at part of the one-time capacity charges for each new connection.

Outstanding Interest associated with financing requires an additional step to derive the Net Present Value (NPV) of all future interest payments to reflect today's dollars. Paying the total amount of future interest payments in advance, before the interest is incurred, would overcharge new connections. The NPV calculation discounts the future interest payments by 2.282%<sup>2</sup>, compounded annually.

Table 4 shows the amount of outstanding interest and the NPV of the outstanding interest using the 2.282% discount factor for the 25% of the PB Force Main Improvement financing.

Table 4 – NPV of Outstanding Interest

NPV of Outstanding Interest				
Description	Total Interest	NPV of Interest	Include ?	Included NPV of Outstanding Interest
2016 SRF Loan - PB Force Main Imp (SSCs)	\$1,668,179	\$1,420,992	No	\$0
2016 SRF Loan - PB Force Main Imp (CFCC)	\$511,737	\$439,138	Yes	\$439,138

The asset adjustments from Table 2 through Table 4 are summarized in Table 5 to show the total asset adjustments.

<sup>2</sup> The discount factor of 2.282% equals the average yield since 2000 of the Treasury Securities at a 3-Year Constant Maturity (Treasury Securities). Treasury Securities are a safe and conservative return on investment for public agency investments.

# Delta Diablo – Capacity Charge Study

Table 5 – Asset Value Adjustments

Valuation Adjustments	
Adjustments	Value (\$)
<b>(+) Capital Related Reserves</b>	
Capital Asset Fund	\$3,542,999
Advanced Treatment Fund	\$21,073,154
Capital Asset Replacement Fund	\$40,492,969
Bay Point - Collections	\$2,555,289
WW Expansion	(\$15,773,313)
<b>Total Capital Related Reserves</b>	<b>\$51,891,098</b>
<b>(-) Outstanding Principal</b>	
2011 SRF Loan - Aeration Basin Imp Project	(\$2,589,124)
2015 CEC Loan - FOG Receiving Facility	(\$262,306)
2016 SRF Loan - PB Force Main Imp (CAR)	(\$7,123,311)
2011 Municipal Finance Corp Loan - Solar Project	(\$989,993)
2015 SRF Loan - BP Pipeline Repair	(\$887,947)
2016 SRF Loan - BP Pipeline Repair	(\$1,619,839)
2014 SRF Loan - BP 2017 Pipeline Repair	(\$2,956,392)
2014 SRF Loan Pump Station Facilities Repair	(\$11,519,975)
<b>Total Outstanding Principal</b>	<b>(\$27,948,888)</b>
<b>(+) NPV of Outstanding Interest</b>	
2016 SRF Loan - PB Force Main Imp (CFCC)	\$439,138
<b>Total Adjustments</b>	<b>\$24,381,347</b>

# Delta Diablo – Capacity Charge Study

## Step 3 – System Demand/Capacity

The existing demand is reflected by total ERUs and system capacity in gpd. The total design capacity of the wastewater treatment plants does not necessarily reflect the safe operating capacity. Once the plant capacity is close to 85%<sup>3</sup> of total capacity, additional upgrades or capacity expansions are required. Therefore, when deriving capacity-related unit rates, the operating capacity is used. Table 6 summarizes the units of service<sup>4</sup> for the wastewater system.

Table 6 – Wastewater System

Wastewater System Information		
Allocation Basis		Units of Service
Bay Point ERUs	(ERU)	7,452
Operational Capacity	(gpd)	16,900,000
SPI Additional Capacity	(gpd)	3,100,000
Plant Capacity	(gpd)	20,000,000
Pump Station Capacity	(gpd)	1,260,000

## Step 4 – Buy-In Component Calculations

The previous steps identified wastewater assets (infrastructure), capital-related reserves, outstanding debt principal, net present value of outstanding interest, and system capacity. The buy-in component can be determined by deriving the cost per ERU of the wastewater assets and adjustments. The net RCLD asset value (Total System Value) of the wastewater treatment plant is divided by the operational plant capacity to derive the unit rate per gallon of operational capacity. For the Bay Point collection system, the current asset value is apportioned over existing Bay Point ERUs, reflecting the value of the collection system on a per ERU basis. The cost per ERU is then derived in Table 7. Regional charges reflect the cost Pittsburg and Antioch will pay, and Bay Point includes the same Regional components plus the Bay Point collection system component.

<sup>3</sup> Operational Capacity is equal to 84.5% of Plant Capacity (20,000,000 gpd x 84.5% = 16,900,000 gpd)

<sup>4</sup> SPI stands for Secondary Process Improvements

# Delta Diablo – Capacity Charge Study

Table 7 – Asset Unit Rate (\$ per ERU)

Buy-In Asset Unit Rate							
Asset Category	RCLD (2024 \$)	Allocation Basis	Units of Service	Unit Rate	Conversion Factor	Regional (\$/ERU)	Bay Point (\$/ERU)
	[A]	[B]	[C]	[D] = A+C	[E]	[F] = DxE	[G] = DxE
Bay Point Collection	\$7,276,521	Bay Point ERUs	7,452	\$976.45	1	\$0	\$977
Land	\$4,320,035	Operational Capacity	16,900,000	\$0.26	200	\$52	\$52
Plant Conveyance	\$21,602,061	Operational Capacity	16,900,000	\$1.28	200	\$256	\$256
Storage & Pumping	\$44,489,041	Operational Capacity	16,900,000	\$2.63	200	\$527	\$527
Treatment	\$67,673,768	Operational Capacity	16,900,000	\$4.00	200	\$801	\$801
Equipment	\$4,430,112	Operational Capacity	16,900,000	\$0.26	200	\$53	\$53
General Admin	\$11,113,071	Operational Capacity	16,900,000	\$0.66	200	\$132	\$132
<b>Total</b>	<b>\$160,904,610</b>					<b>\$1,821</b>	<b>\$2,798</b>

Table 8 summarizes the adjustments for capital-related reserves, outstanding principal, and the net present value of outstanding interest with the associated cost per ERU. The cost per ERU is derived for both Regional and Bay Point. Certain debt obligations relate to the Bay Point collection system and are assigned solely to Bay Point.

Table 8 – Adjustments (\$ per ERU)

Valuation Adjustments							
Adjustments	Value (\$)	Allocation Basis	Units of Service	Unit Rate	Conversion Factor	Regional (\$/ERU)	Bay Point (\$/ERU)
	[A]	[B]	[C]	[D] = A+C	[E]	[F] = DxE	[G] = DxE
<b>(+) Capital Related Reserves</b>							
Capital Asset Fund	\$3,542,999	Operational Capacity	16,900,000	\$0.21	200	\$42	\$42
Advanced Treatment Fund	\$21,073,154	Operational Capacity	16,900,000	\$1.25	200	\$250	\$250
Capital Asset Replacement Fund	\$40,492,969	Operational Capacity	16,900,000	\$2.40	200	\$480	\$480
Bay Point - Collections	\$2,555,289	Bay Point ERUs	7,452	\$342.90	1	\$0	\$343
WW Expansion	(\$15,773,313)	Operational Capacity	16,900,000	(\$0.93)	200	(\$187)	(\$187)
<b>Total Capital Related Reserves</b>	<b>\$51,891,098</b>					<b>\$585</b>	<b>\$928</b>
<b>(-) Outstanding Principal</b>							
2011 SRF Loan - Aeration Basin Imp Project	(\$2,589,124)	Operational Capacity	16,900,000	(\$0.15)	200	(\$31)	(\$31)
2015 CEC Loan - FOG Receiving Facility	(\$262,306)	Operational Capacity	16,900,000	(\$0.02)	200	(\$4)	(\$4)
2016 SRF Loan - PB Force Main Imp (SSCs)	(\$7,123,311)	Operational Capacity	16,900,000	(\$0.42)	200	(\$85)	(\$85)
2011 Municipal Finance Corp Loan - Solar Project	(\$989,993)	Operational Capacity	16,900,000	(\$0.06)	200	(\$12)	(\$12)
2015 SRF Loan - BP Pipeline Repair	(\$887,947)	Bay Point ERUs	7,452	(\$119.16)	1	\$0	(\$120)
2016 SRF Loan - BP Pipeline Repair	(\$1,619,839)	Bay Point ERUs	7,452	(\$217.37)	1	\$0	(\$218)
2014 SRF Loan - BP 2017 Pipeline Repair	(\$2,956,392)	Bay Point ERUs	7,452	(\$396.72)	1	\$0	(\$397)
2014 SRF Loan Pump Station Facilities Repair	(\$11,519,975)	Operational Capacity	16,900,000	(\$0.68)	200	(\$137)	(\$137)
<b>Total Outstanding Principal</b>	<b>(\$27,948,888)</b>					<b>(\$269)</b>	<b>(\$1,004)</b>
<b>(+) NPV of Outstanding Interest</b>							
2016 SRF Loan - PB Force Main Imp (CFCC)	\$439,138	Operational Capacity	16,900,000	\$0.03	200	\$6	\$6
<b>Total NPV of Outstanding Interest</b>	<b>\$439,138</b>					<b>\$6</b>	<b>\$6</b>
<b>Total Adjustments</b>	<b>\$24,381,347</b>					<b>\$322</b>	<b>(\$70)</b>

Table 9 summarizes the total buy-in amount per ERU for Regional and Bay Point rounded to the nearest dollar.

# Delta Diablo – Capacity Charge Study

Table 9 – Buy-In Calculation (\$ per ERU)

System Buy-In Components		
Description	Regional (\$/ERU)	Bay Point (\$/ERU)
Wastewater Infrastructure	\$1,821	\$2,798
(+) Capital Related Reserves	\$585	\$928
(-) Outstanding Principal	(\$269)	(\$1,004)
(+) NPV of Outstanding Interest	\$6	\$6
<b>System Buy-In per ERU</b>	<b>\$2,143</b>	<b>\$2,728</b>

## Step 5: Incremental Costs

The capacity charge includes planned capital projects for secondary process and pump station improvements, as shown in Table 10. The secondary process improvements will add an additional 3.1 MGD of capacity and the pump station improvements will add an additional 1.26 MGD of capacity.

Table 10 – Incremental Costs

Incremental-Cost Components	
Capital Projects	Projected Costs
Secondary Process Improvements	\$32,550,000
Pump Station Improvements	\$4,050,000
<b>Total Incremental Component</b>	<b>\$36,600,000</b>

## Step 6: Incremental-Cost Component Calculations

The incremental costs are associated with constructing additional capacity. Therefore, the project cost is spread over the additional capacity added to the wastewater system in gpd. Table 11 summarizes the cost per gallon of incremental capital projects and the associated cost per ERU for the two service areas.

Table 11 – Incremental-Cost Component (\$ per ERU)

Incremental-Cost Components							
Capital Projects	Projected Cost	Allocation Basis	Units of Service	Unit Rate	Conversion Factor	Regional (\$/ERU)	Bay Point (\$/ERU)
	(A)	(B)	(C)	(D) = A+C	(E)	(F) = DxE	(G) = DxE
Secondary Process Improvements	\$32,550,000	<b>SPI Additional Capacity</b>	3,100,000	\$10.50	200	\$2,100	\$2,100
Pump Station Improvements	\$4,050,000	<b>Pump Station Capacity</b>	1,260,000	\$3.21	200	\$643	\$643
<b>Total Incremental Component</b>						<b>\$2,743</b>	<b>\$2,743</b>

## Updated Capacity Charges

Table 12 summarizes the updated Regional and Bay Point wastewater capacity charges per ERU by combining the buy-in and the incremental-cost component. Developing parcels will be assigned ERUs on a case-by-case basis to account for total residential dwelling units, total flow, and strength loading in relation to an ERU.

Table 12 – Capacity Charge Summary

Proposed Wastewater Capacity Charge (\$/ERU)		
Capacity Fee Components	Regional (\$/ERU)	Bay Point (\$/ERU)
<b>System Buy-In Component</b>		
Wastewater Infrastructure	\$1,821	\$2,798
(+) Capital Work-in-Progress	\$0	\$0
(+) Capital Related Reserves	\$585	\$928
(-) Outstanding Principal	(\$269)	(\$1,004)
(+) NPV of Outstanding Interest	\$6	\$6
<b>System Buy-In per ERU</b>	<b>\$2,143</b>	<b>\$2,728</b>
<b>Incremental Component</b>		
Secondary Process Improvements	\$2,100	\$2,100
Pump Station Improvements	\$643	\$643
<b>Total Incremental Component</b>	<b>\$2,743</b>	<b>\$2,743</b>
<b>Total Proposed Wastewater Capacity Fee</b>	<b>\$4,886</b>	<b>\$5,471</b>

### Annual Capacity Charge Adjustment

In conjunction with adopting the updated wastewater capacity charges, IB Consulting recommends adjusting the capacity charge annually to keep pace with inflation by applying the Engineering News Record Construction Cost Index (ENR). The District should also review its capacity charges every five years, in conjunction with its master plan updates, to capture any significant changes and ensure capacity charges remain equitable.

**Appendix A – Asset Listing**

---

*This Page Intentionally Left Blank*

# Delta Diablo – Capacity Charge Study

## Appendix B – Debt Schedules

Table 13 – Debt Schedules FY 2025 to FY 2034

Financial Information											
Wastewater Debt	Funding Source	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
<b>2011 SRF Loan - Aeration Basin Imp Project</b> <i>100% WW CAR</i>											
Principal		\$259,040	\$265,776	\$272,686	\$279,776	\$287,050	\$294,513	\$302,170	\$310,027	\$318,087	\$0
Interest		\$67,317	\$60,582	\$53,672	\$46,582	\$39,308	\$31,845	\$24,187	\$16,331	\$8,270	\$0
Subtotal 2011 SRF Loan - Aeration Basin Imp Project		\$326,358	\$326,358	\$326,358	\$326,358	\$326,358	\$326,358	\$326,358	\$326,358	\$326,358	\$0
<b>2015 CEC Loan - FOG Receiving Facility</b> <i>100% WW CAR</i>											
Principal		\$51,420	\$51,936	\$52,457	\$52,980	\$53,513	\$0	\$0	\$0	\$0	\$0
Interest		\$2,495	\$1,980	\$1,459	\$935	\$402	\$0	\$0	\$0	\$0	\$0
Subtotal 2015 CEC Loan - FOG Receiving Facility		\$53,916	\$53,916	\$53,916	\$53,916	\$53,915	\$0	\$0	\$0	\$0	\$0
<b>2016 SRF Loan - PB Force Main Imp (CAR)</b> <i>75% WW CAR</i>											
Principal		\$249,838	\$254,585	\$259,422	\$264,351	\$269,374	\$274,492	\$279,707	\$285,022	\$290,437	\$295,955
Interest		\$132,969	\$128,177	\$123,294	\$118,319	\$113,248	\$108,081	\$102,817	\$97,452	\$91,985	\$86,414
Subtotal 2016 SRF Loan - PB Force Main Imp (CAR)		\$382,807	\$382,762	\$382,716	\$382,670	\$382,622	\$382,573	\$382,524	\$382,473	\$382,422	\$382,369
<b>2016 SRF Loan - PB Force Main Imp (CFCC)</b> <i>25% WW CFCC</i>											
Principal		\$84,862	\$86,474	\$88,117	\$89,791	\$91,497	\$93,236	\$95,007	\$96,812	\$98,652	\$100,526
Interest		\$42,726	\$41,098	\$39,440	\$37,749	\$36,027	\$34,272	\$32,484	\$30,662	\$28,805	\$26,912
Subtotal 2016 SRF Loan - PB Force Main Imp (CFCC)		\$127,587	\$127,572	\$127,557	\$127,541	\$127,524	\$127,508	\$127,491	\$127,474	\$127,456	\$127,439
<b>2011 Municipal Finance Corp Loan - Solar Project</b> <i>100% WW CA</i>											
Principal		\$110,410	\$119,768	\$129,682	\$140,186	\$151,310	\$163,086	\$175,550	\$0	\$0	\$0
Interest		\$47,173	\$41,650	\$35,662	\$29,180	\$22,176	\$14,620	\$6,477	\$0	\$0	\$0
Subtotal 2011 Municipal Finance Corp Loan - Solar Project		\$157,584	\$161,418	\$165,344	\$169,366	\$173,486	\$177,706	\$182,028	\$0	\$0	\$0
<b>2015 SRF Loan - BP Pipeline Repair</b> <i>100% BP CAR</i>											
Principal		\$34,802	\$35,464	\$36,137	\$36,824	\$37,524	\$38,237	\$38,963	\$39,703	\$40,458	\$41,227
Interest		\$16,540	\$15,873	\$15,193	\$14,500	\$13,793	\$13,073	\$12,340	\$11,593	\$10,831	\$10,055
Subtotal 2015 SRF Loan - BP Pipeline Repair		\$51,343	\$51,336	\$51,330	\$51,324	\$51,317	\$51,310	\$51,303	\$51,296	\$51,289	\$51,282
<b>2016 SRF Loan - BP Pipeline Repair</b> <i>100% BP CAR</i>											
Principal		\$59,997	\$61,137	\$62,298	\$63,482	\$64,688	\$65,917	\$67,170	\$68,446	\$69,746	\$71,072
Interest		\$30,207	\$29,056	\$27,884	\$26,689	\$25,471	\$24,230	\$22,966	\$21,678	\$20,365	\$19,027
Subtotal 2016 SRF Loan - BP Pipeline Repair		\$90,204	\$90,193	\$90,182	\$90,171	\$90,159	\$90,148	\$90,136	\$90,124	\$90,111	\$90,099
<b>2014 SRF Loan - BP 2017 Pipeline Repair</b> <i>100% BP CAR</i>											
Principal		\$84,816	\$86,427	\$88,069	\$89,743	\$91,448	\$93,185	\$94,956	\$96,760	\$98,599	\$100,472
Interest		\$55,366	\$53,739	\$52,081	\$50,392	\$48,671	\$46,917	\$45,129	\$43,308	\$41,452	\$39,561
Subtotal 2014 SRF Loan - BP 2017 Pipeline Repair		\$140,182	\$140,166	\$140,151	\$140,135	\$140,119	\$140,102	\$140,085	\$140,068	\$140,051	\$140,033
<b>2014 SRF Loan Pump Station Facilities Repair</b> <i>100% WW CAR</i>											
Principal		\$301,470	\$307,197	\$313,034	\$318,982	\$325,043	\$331,218	\$337,511	\$343,924	\$350,459	\$357,117
Interest		\$216,016	\$210,233	\$204,341	\$198,337	\$192,219	\$185,984	\$179,631	\$173,158	\$166,561	\$159,839
Subtotal 2014 SRF Loan Pump Station Facilities Repair		\$517,485	\$517,431	\$517,375	\$517,319	\$517,261	\$517,202	\$517,143	\$517,082	\$517,020	\$516,956

# Delta Diablo – Capacity Charge Study

Table 14 – Debt Schedules FY 2035 to FY 2044

Financial Information											
Wastewater Debt	Funding Source	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043	FY 2044
<b>2011 SRF Loan - Aeration Basin Imp Project</b> <span style="float: right;">100% WW CAR</span>											
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2011 SRF Loan - Aeration Basin Imp Project		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2015 CEC Loan - FOG Receiving Facility</b> <span style="float: right;">100% WW CAR</span>											
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2015 CEC Loan - FOG Receiving Facility		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2016 SRF Loan - PB Force Main Imp (CAR)</b> <span style="float: right;">75% WW CAR</span>											
Principal		\$301,579	\$307,309	\$313,147	\$319,097	\$325,160	\$331,338	\$337,633	\$344,049	\$350,585	\$357,247
Interest		\$80,737	\$74,953	\$69,059	\$63,052	\$56,932	\$50,695	\$44,340	\$37,864	\$31,265	\$24,541
Subtotal 2016 SRF Loan - PB Force Main Imp (CAR)		\$382,316	\$382,262	\$382,206	\$382,150	\$382,092	\$382,033	\$381,973	\$381,912	\$381,850	\$381,787
<b>2016 SRF Loan - PB Force Main Imp (CFCC)</b> <span style="float: right;">25% WW CFCC</span>											
Principal		\$102,436	\$104,382	\$106,366	\$108,387	\$110,446	\$112,544	\$114,683	\$116,862	\$119,082	\$121,345
Interest		\$24,984	\$23,020	\$21,017	\$18,977	\$16,898	\$14,780	\$12,621	\$10,422	\$8,180	\$5,896
Subtotal 2016 SRF Loan - PB Force Main Imp (CFCC)		\$127,421	\$127,402	\$127,383	\$127,364	\$127,344	\$127,324	\$127,304	\$127,283	\$127,262	\$127,241
<b>2011 Municipal Finance Corp Loan - Solar Project</b> <span style="float: right;">100% WW CAR</span>											
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2011 Municipal Finance Corp Loan - Solar Project		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2015 SRF Loan - BP Pipeline Repair</b> <span style="float: right;">100% BP CAR</span>											
Principal		\$42,010	\$42,808	\$43,621	\$44,450	\$45,295	\$46,155	\$47,032	\$47,926	\$48,836	\$49,764
Interest		\$9,264	\$8,459	\$7,638	\$6,801	\$5,948	\$5,080	\$4,194	\$3,292	\$2,373	\$1,436
Subtotal 2015 SRF Loan - BP Pipeline Repair		\$51,274	\$51,267	\$51,259	\$51,251	\$51,243	\$51,235	\$51,227	\$51,218	\$51,209	\$51,201
<b>2016 SRF Loan - BP Pipeline Repair</b> <span style="float: right;">100% BP CAR</span>											
Principal		\$72,422	\$73,798	\$75,200	\$76,629	\$78,085	\$79,569	\$81,080	\$82,621	\$84,191	\$85,790
Interest		\$17,664	\$16,275	\$14,859	\$13,417	\$11,947	\$10,449	\$8,923	\$7,368	\$5,783	\$4,169
Subtotal 2016 SRF Loan - BP Pipeline Repair		\$90,086	\$90,073	\$90,059	\$90,046	\$90,032	\$90,018	\$90,004	\$89,989	\$89,974	\$89,959
<b>2014 SRF Loan - BP 2017 Pipeline Repair</b> <span style="float: right;">100% BP CAR</span>											
Principal		\$102,381	\$104,326	\$106,308	\$108,328	\$110,386	\$112,484	\$114,621	\$116,799	\$119,018	\$121,279
Interest		\$37,634	\$35,670	\$33,669	\$31,630	\$29,552	\$27,435	\$25,277	\$23,079	\$20,839	\$18,556
Subtotal 2014 SRF Loan - BP 2017 Pipeline Repair		\$140,015	\$139,996	\$139,977	\$139,958	\$139,939	\$139,919	\$139,898	\$139,878	\$139,857	\$139,835
<b>2014 SRF Loan Pump Station Facilities Repair</b> <span style="float: right;">100% WW CAR</span>											
Principal		\$363,903	\$370,817	\$377,862	\$385,042	\$392,358	\$399,812	\$407,409	\$415,150	\$423,037	\$431,075
Interest		\$152,989	\$146,009	\$138,897	\$131,649	\$124,264	\$116,739	\$109,070	\$101,256	\$93,293	\$85,179
Subtotal 2014 SRF Loan Pump Station Facilities Repair		\$516,892	\$516,826	\$516,759	\$516,691	\$516,622	\$516,551	\$516,479	\$516,405	\$516,330	\$516,254

# Delta Diablo – Capacity Charge Study

Table 15 – Debt Schedules FY 2045 to FY 2053

Financial Information										
Wastewater Debt	Funding Source	FY 2045	FY 2046	FY 2047	FY 2048	FY 2049	FY 2050	FY 2051	FY 2052	FY 2053
<b>2011 SRF Loan - Aeration Basin Imp Project</b> <i>100% WW CAR</i>										
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2011 SRF Loan - Aeration Basin Imp Project		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2015 CEC Loan - FOG Receiving Facility</b> <i>100% WW CAR</i>										
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2015 CEC Loan - FOG Receiving Facility		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2016 SRF Loan - PB Force Main Imp (CAR)</b> <i>75% WW CAR</i>										
Principal		\$364,034	\$370,951	\$377,999	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$17,688	\$10,706	\$3,591	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2016 SRF Loan - PB Force Main Imp (CAR)		\$381,723	\$381,657	\$381,590	\$0	\$0	\$0	\$0	\$0	\$0
<b>2016 SRF Loan - PB Force Main Imp (CFCC)</b> <i>25% WW CFCC</i>										
Principal		\$123,650	\$126,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$3,569	\$1,197	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2016 SRF Loan - PB Force Main Imp (CFCC)		\$127,219	\$127,197	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2011 Municipal Finance Corp Loan - Solar Project</b> <i>100% WW CA</i>										
Principal		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2011 Municipal Finance Corp Loan - Solar Project		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2015 SRF Loan - BP Pipeline Repair</b> <i>100% BP CAR</i>										
Principal		\$50,710	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$482	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2015 SRF Loan - BP Pipeline Repair		\$51,192	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2016 SRF Loan - BP Pipeline Repair</b> <i>100% BP CAR</i>										
Principal		\$87,420	\$89,081	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interest		\$2,523	\$846	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal 2016 SRF Loan - BP Pipeline Repair		\$89,943	\$89,927	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2014 SRF Loan - BP 2017 Pipeline Repair</b> <i>100% BP CAR</i>										
Principal		\$123,584	\$125,932	\$128,324	\$130,763	\$133,247	\$135,779	\$138,358	\$0	\$0
Interest		\$16,230	\$13,859	\$11,444	\$8,983	\$6,474	\$3,919	\$1,314	\$0	\$0
Subtotal 2014 SRF Loan - BP 2017 Pipeline Repair		\$139,813	\$139,791	\$139,768	\$139,745	\$139,721	\$139,697	\$139,673	\$0	\$0
<b>2014 SRF Loan Pump Station Facilities Repair</b> <i>100% WW CAR</i>										
Principal		\$439,266	\$447,612	\$456,116	\$464,782	\$473,613	\$482,612	\$491,782	\$501,125	\$510,647
Interest		\$76,911	\$68,485	\$59,900	\$51,151	\$42,236	\$33,152	\$23,896	\$14,463	\$4,851
Subtotal 2014 SRF Loan Pump Station Facilities Repair		\$516,176	\$516,097	\$516,016	\$515,934	\$515,850	\$515,764	\$515,677	\$515,588	\$515,498