

# **IRONHOUSE SANITARY DISTRICT**

## **CAPACITY FEE UPDATE**

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**FINAL DRAFT 8-24-06**

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August 24, 2006

Ironhouse Sanitary District  
450 Walnut Meadows Drive  
Oakley, CA 94561

Attn: Tom Williams, General Manager

Bartle Wells Associates is pleased to submit the attached *Capacity Fee Update*. The report develops new capacity fees that equitably recover and/or fund the costs of infrastructure required to serve new development. Key recommendations include:

**Plant Capacity Fee: \$5,073 per ESU** – The updated fee recovers the cost of expansion capacity in the District's anticipated new wastewater treatment and effluent disposal facilities. The new facilities are projected to cost \$64 million and have a capacity of 4.3 million gallons per day (mgd). Existing customers and new development will each be responsible for funding their share of capacity in the new facilities. The fee also recovers the costs of providing interim expansion capacity needed to accommodate wastewater flows from new development before the new facilities are operational.

**Trunk Line Capacity Fee: \$903 per ESU** – The updated fee is designed to fund the costs of future sewer trunk lines, pump stations, and other collection system infrastructure that will need to be built to handle flows from new development. The fee incorporates current cost estimates for capital needs identified in the 2004 Sewer Master Plan and two additional growth-related projects identified by the District. All facilities funded by this fee are 100% growth-induced. The fee will be used to both a) directly fund required facilities that will be constructed by the District, and b) provide reimbursement funding to developers who install oversized facilities, pursuant to the District's reimbursement policy.

**Connection Fee: \$1,392 per ESU** – The updated fee recovers a pro-rata share of the value of existing facilities and assets (e.g. land, buildings, pipelines, etc.) that provide benefit to new development.

BWA recommends the District continue to update its capacity fees annually based on the change in the Engineering News-Record Construction Cost Index to account for construction cost inflation. BWA also recommends that the District recalculate its capacity fees as needed to reflect any substantial changes in project costs, such as revised cost estimates for the new treatment and disposal facilities. In general, BWA recommends that capacity fees be independently reviewed not less than once every five years.

We enjoyed working with the District on this assignment and appreciate the cooperation and assistance we received from the District throughout the project.

Very truly yours,

BARTLE WELLS ASSOCIATES

Alex T. Handlers, CIPFA  
Vice-President

Reed V. Schmidt, CIPFA  
Principal

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## Attachments:

- Survey of Wastewater Development Impact Fees per ESU
- Fixed Asset List & Valuation

# Ironhouse Sanitary District Capacity Fee Update

## Background

Capacity charges are one-time fees charged to new development to recover the costs of infrastructure needed to serve growth. Ironhouse Sanitary District's capacity fees were last established in 1995. The fees have been periodically adjusted to account for construction cost inflation, but have not been recalculated to include new capital costs identified in the District's 2004 Sewer Master Plan, 2005 Wastewater Facilities Master Plan, and other infrastructure needs for new development.

Bartle Wells Associates was retained to review and update the District's capacity fees. The objective of our analysis is to develop new capacity fees that equitably recover the costs of infrastructure and fixed assets required to serve new development. This report summarizes our findings and recommendations and details the methodology used to calculate new capacity fees per Equivalent Service Unit (ESU). One ESU represents the wastewater discharge of a typical single family residence, which for the purposes of this report is estimated at 300 gallons per day (gpd) of domestic strength wastewater.

There are many acceptable methods for calculating capacity charges. BWA generally prefers a simple and straightforward approach that is easy to understand and administer. The recommendations presented in this memo are designed to meet all legal requirements and be fair to both existing and future customers.

## Government Code

Development impact fees are governed by California Government Code Section 66000 et. seq. commonly known as the Mitigation Fee Act or AB1600. Section 66013 of the Code pertains specifically to water and sewer connection fees and states that the fee "*shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed*" unless approved by a two-thirds vote. The Code also states that a capacity charge can recover costs for facilities in existence at the time a charge is imposed or charges for new facilities to be constructed in the future that will provide benefit to the property being charged. The Code does not specify any method for determining an appropriate fee.

The Code also specifies a number of accounting and reporting regulations regarding capacity fees. Notably, the District must account for capacity fees separately from other revenues and cannot use capacity fees to recover operating expenses or the costs of repairing or replacing system deficiencies benefiting existing customers. However, capacity fees can be used to reimburse the District for prior capital expenditures that provide capacity for new development, such as pipelines, pump stations, land, the District's administration building, etc. The District should review its accounting practices to ensure compliance with the code.

## Overview of Current Capacity Fees

Ironhouse Sanitary District recovers three types of capacity fees from new development.

- **Plant Capacity Fee** – Recovers the cost of expansion capacity in the District's anticipated new wastewater treatment facility and effluent disposal system.
- **Trunk Line Capacity Fee** – Funds the costs of future sewer trunk lines, pump stations, and other infrastructure that will need to be constructed to convey wastewater service to new development including infrastructure identified in the 2004 Sewer Master Plan or amendments thereto.
- **Connection Fee** – Recovers a pro-rata share of the value of existing facilities that provide benefit to new development.

Fees are calculated as of the date of the District building permit application and must be paid as a condition of permit issuance and approval. The District has periodically adjusted its capacity fees to account for construction cost inflation based on the *Engineering News-Record* Construction Cost Index for the San Francisco Bay Area. However, the District's capacity fees have not been recalculated in many years and no longer reflect the cost of infrastructure benefiting growth: Plant Capacity Fees were last calculated in 1995, Trunk Line Capacity Fees were most recently calculated in 1990, and the District has not recalculated its Connection Fees in approximately the last 18 years.

## Plant Capacity Fee

**Background:** The District's current wastewater treatment facility was constructed in the early 1980s. The facility is approaching full capacity and was not designed to meet new, more stringent, wastewater discharge permit requirements.

The District is in the planning stages for designing and building a new treatment plant and effluent disposal system to both meet its permit requirements and provide additional capacity for growth. The facility will be designed to handle 4.3 mgd of standard/domestic strength wastewater flow and will be built with the potential to be expanded to 8.6 mgd. The District anticipates that the new 4.3 mgd will begin operating around September 2010. About 2.3 mgd of capacity is required to process the wastewater flow from existing customers leaving approximately 2.0 mgd of capacity for expansion.

The new treatment plant will be designed to have the expansion potential to meet projected wastewater flows at build-out based on the Contra Costa County and City of Oakley's General Plan specifications. The proposed fee is based on cost estimates for project Alternative 2a, one of the lower-cost alternatives developed in the District's 2006 Wastewater Facilities Plan Update. Existing and future customers will both be required to fund their share of capacity in the new plant and disposal facilities.

**Purpose:** The recommended Plant Capacity Fee is designed to recover: a) the pro-rata cost of expansion capacity in the new wastewater treatment and disposal facilities, and b) the cost of interim expansion to the District's existing treatment and disposal facilities, required to accommodate new development until the new plant begins operating.

**Methodology:** The Plant Capacity Fee is calculated by dividing expansion-related costs by expansion capacity to determine a cost per unit of standard/domestic strength wastewater. This unit cost can then be applied to the estimated wastewater discharge of each new development to ensure each connection pays for its capacity needs in the new wastewater treatment and disposal facilities.

Costs of the new wastewater treatment and disposal facilities are allocated to current and future customers on a pro-rata basis. Existing customers, which account for an estimated 2.3 mgd of wastewater flow, are allocated 53.5% of costs, which equates to about \$34.2 million of the total estimated cost of \$64 million. With approximately 2.0 mgd of expansion capacity, growth would be required to fund about 46.5%, or \$29.8 million, of the new facilities.

<b>New Wastewater Facility Cost Allocation</b>			
	Existing Customers	Expansion Capacity	Total
<b>Plant Capacity Allocation</b>			
Flow (mgd)	2.30	2.00	4.30
% of total	53.5%	46.5%	100.0%
<b>Cost Allocation</b>			
Treatment plant project cost	\$34,233,000	\$29,767,000	\$64,000,000
% of total	53.5%	46.5%	100.0%

The following table calculates a new fee by dividing total expansion-related costs by expansion capacity. Expansion-related costs include the cost of providing interim expansion capacity to accommodate new development while the new treatment and disposal facilities are being built. The resulting unit cost is then multiplied by the District's flow estimate of 300 gpd per new Equivalent Service Unit (ESU) to determine the fee per new residential customer. The District typically measures wastewater discharge in terms of ESUs with one ESU representing the discharge of a typical single family residence. Non-residential discharge can be converted into ESUs based on criteria including estimated wastewater flow and strength. As shown on the table, the fee per ESU is calculated at \$5,073.

<b>Plant Capacity Fee Calculation</b>	
<b>Expansion Costs</b>	
Treatment plant project cost	\$29,767,000
90% of interim plant expansion costs	<u>4,056,000</u>
Total	33,823,000
<b>Expansion Capacity (mgd)</b>	2.00
<b>Unit Cost (Expansion Costs / Expansion Capacity)</b>	
\$ per mgd	\$16,911,500
\$ per gpd	16.91
<b>Flow per ESU (gpd)</b>	300
<b>Plant Capacity Fee (per ESU)</b>	\$5,073

## Trunk Line Capacity Fee

**Background:** The District has identified a number of collection system capital improvements needed to serve new development through build-out. These collection system improvements include new sewer trunk lines, pump stations, and related infrastructure. The new infrastructure ties into the District's existing collection system, which then conveys wastewater to the District treatment plant.

The District's Sewer Master Plan was updated in January 2004 by Raines, Melton & Carella, Inc., the District's consulting engineers. The master plan or amendments thereto identify sewer collection system improvements needed to accommodate future development in the District's service area at ultimate, build-out conditions. The District requires new development to fully fund and/or install these improvements since they are 100% growth-induced and are needed exclusively to serve growth. The District's Trunk Line Capacity Fee was established to recover the costs of the collection system infrastructure needed to serve new development. Trunk Line Capacity fees are due from all new development. However, the District provides a credit up to the total fee obligation to developers who install new, eligible, infrastructure in-lieu of paying the fee.

Developers are sometimes required to install and/or fund eligible trunk line or other master plan facilities that have more capacity than needed to serve their specific project. For example, the District might require a developer to install a 15-inch pipeline pursuant to the master plan when an 8-inch pipeline is adequate for the project's needs. To help ensure equitable cost sharing among future connections, the District established a reimbursement policy to help developers recover the costs of oversized master plan facilities that will benefit future development, in accordance with the 2004 Sewer Master Plan. The District typically allocates a portion of its annual Trunk Line Capacity Fee revenues for reimbursements where the cost to build the eligible facilities exceeds a developer's Trunk Line Fee obligation. In some cases, the District participates in cost-sharing with developers to fund eligible oversizing/excess cost requirements using existing, and/or future Trunk Line Capacity Fee reserves, provided such reserves are

available. The District is in the process of reviewing its existing reimbursement policy, but does not anticipate making substantive changes to the policy.

**Purpose:** The Trunk Line Capacity Fee is designed to recover the costs of collection system improvements required to serve new development in accordance with the 2004 Sewer Master Plan or amendments thereto. The capital needs are 100% growth-related.

**Methodology:** The Trunk Line Capacity Fee is calculated by dividing the costs of new collection system infrastructure required to serve growth by expansion capacity through build-out. This method equitably recovers costs on a pro-rata basis from all new development within the District’s service area.

The fee recovers the costs of new eligible pipelines and pump stations identified in the District’s 2004 Sewer Master Plan, plus additional facilities identified by the District as necessary for serving growth through build-out. Costs identified in the District’s 2004 Sewer Master Plan are adjusted into current dollars using the Engineering News-Record Construction Cost Index, a widely used measure of construction cost inflation. For example, a project estimated to cost exactly \$1 million in January 2004 would currently cost approximately \$1.085 million accounting for 8.5% construction cost inflation over the past 2-1/2 years.

<b>Collection System Capital Improvements Required by Growth</b>		
Project Name	January 2004 Cost Estimate	April 2006 Cost Estimate
ENR-CCI for San Francisco Area Increase	7,786.30	8,447.44 8.5%
Neroly Rd / Brownstone Rd / Hwy 4	\$3,118,000	\$3,383,000
Off-Island Regional Pump Station	1,373,000	1,490,000
Cypress Corridor Pump Station	1,137,000	1,234,000
Ruby St / Duarte Ave	304,000	330,000
Ironwood Forcemain Ext & Grav Sew	813,000	882,000
Carol Lane Relief Sewer	409,000	444,000
Second Street	257,000	279,000
Highway 4 (excluding interim connection)	5,089,000	5,521,000
Pump Station Upgrades	378,000	410,000
14" Force Main Cypress Corridor	n/a	3,000,000
Web-14 Pump Station	<u>n/a</u>	<u>2,000,000</u>
<b>Total</b>	<b>12,878,000</b>	<b>18,973,000</b>

Source: Sewer Master Plan; January 30, 2004 and Ironhouse Sanitary District.  
Note: All projects are 100% growth-induced.

Based on flow projections at ultimate build-out of the District’s service area, the District’s collection system needs to be sized to handle 8.6 mgd of flow capacity. Current wastewater flows are estimated at about 2.3 mgd. Flows from future development are projected at 6.3 mgd. The following table calculates a new Trunk Line Capacity Fee at \$903 per ESU by dividing the required facility costs benefiting new development by expansion capacity through build-out.

<b>Trunk Line Capacity Fee Calculation</b>	
New Collection System Infrastructure for Expansion	\$18,973,000
Expansion Capacity (mgd)*	6.30
<u>Cost Per Unit</u>	
Per mgd	\$3,011,587
Per gpd	3.01
Flow Per ESU (gpd)	300
Trunk Line Capacity Fee per ESU	\$903
* Buildout capacity of 8.6 mgd less current estimated flow of 2.3 mgd.	

## Connection Fee

**Background:** In addition to funding anticipated growth-related infrastructure needs, such as expansion capacity in the new treatment plant, future development should reimburse the District for a share of existing facilities that provide capacity or benefit to serve growth. These facilities include oversized pipelines and pump stations designed to meet the District’s long-term capacity needs, as well as other assets, such as land and buildings, that will provide benefit to all future customers. The District’s existing Connection Fee was developed many years ago and does not recover the value of expansion capacity in previously-funded facilities.

**Purpose:** The District’s Connection Fee is designed to recover a pro-rata share of the value of existing infrastructure and assets that provide benefit to growth. The Connection Fee represents a reimbursement to the District for previously-funded facilities and assets that provide benefit to new development.

**Methodology:** The District’s Connection Fee is calculated based on an average buy-in methodology: the value of existing assets (with capacity to serve growth) divided by total capacity through build-out. This method equitably recovers costs for shared and oversized facilities on a pro-rata basis from all customers based on capacity. The current value of District assets is calculated based on estimated replacement cost less depreciation, a standard method for estimating current value.

The value of sewer pipelines is calculated based on a conservative estimate of current pipeline installation costs and depreciation from estimated installation date assuming a 50-year useful life for all pipelines. For example, an estimated 52 miles of pipelines were constructed in the 1980s. The current replacement value of these pipelines is estimated at \$60 per linear foot, totaling \$16.5 million. Since these pipelines are on average about 20 years old, the replacement cost is depreciated by 40% (20 years age / 50 years of useful life) resulting in a current depreciated value of about \$9.9 million. This approach may overstate depreciation and understate actual current value – since many of the District’s pipelines have been, or will remain, in service for more than 50 years – but ensures that new development does not fund facilities that have outlived their useful life. The total buy-in value for existing sewer pipelines is estimated at a little under \$25.2 million as summarized on the following table.

Value of Existing Sewer Pipelines								
Decade Purchased	% of Pipelines Installed	Miles of Pipelines	Feet of Pipelines	Estimated Current Cost \$60 per foot	Depreciation <sup>1</sup>			Replacement Cost Less Depreciation
					Age	%	\$	
<b>Collection System Pipelines</b>								
1940s	5%	6.5	34,320	\$2,059,200	60	100.0%	\$2,059,200	\$0
1950s	5%	6.5	34,320	2,059,200	50	100.0%	2,059,200	0
1960s	5%	6.5	34,320	2,059,200	40	80.0%	1,647,360	411,840
1970s	5%	6.5	34,320	2,059,200	30	60.0%	1,235,520	823,680
1980s	40%	52.0	274,560	16,473,600	20	40.0%	6,589,440	9,884,160
1990s	25%	32.5	171,600	10,296,000	10	20.0%	2,059,200	8,236,800
2000+	15%	19.5	102,960	6,177,600	3	6.0%	370,656	5,806,944
<b>Total</b>	<b>100%</b>	<b>130.0</b>	<b>686,400</b>	<b>41,184,000</b>			<b>16,020,576</b>	<b>25,163,424</b>

1 Based on 50-year estimated useful life.  
Source: Ironhouse Sanitary District

The buy-in value for existing wastewater pump stations is also estimated at replacement cost less depreciation. Based on information provided by the District, the current depreciated value of existing pump stations is estimated at about \$3.9 million as shown on the following table.

Value of Wastewater Pump Stations					
<b>OLDER PUMP STATIONS</b>		<b>NEWER PUMP STATIONS (4 Total)</b>		<b>TOTAL</b>	
<b>Replacement Cost</b>		<b>Estimated Cost</b>	2,900,000	<b>Replacement Cost</b>	10,700,000
# of Older Pump Stations	26	<b>Depreciation</b>		<b>Depreciation</b>	6,820,000
Est. Current Cost per Unit	<u>300,000</u>	Amount (%)	20%	<b>Replacement Cost</b>	
Subtotal	7,800,000	Amount (\$)	580,000	<b>Less Depreciation</b>	3,880,000
<b>Depreciation</b>		<b>Replacement Cost</b>			
Amount (%)	80%	<b>Less Depreciation</b>	2,320,000		
Amount (\$)	6,240,000				
<b>Replacement Cost</b>					
<b>Less Depreciation</b>	1,560,000				

The value of other shared District assets that provide benefit to future customers – including land improvements, buildings, and the Jersey Island pipeline – is also estimated based on replacement cost less depreciation. The value of these assets is calculated by escalating the original purchase price of each improvement into current dollars based on the change in the *Engineering News-Record* Construction Cost Index for the San Francisco Bay Area. This value is then reduced to account for depreciation since each asset's year of acquisition. The value of land is conservatively estimated at its original purchase price. The total current depreciated value of these shared assets is estimated at approximately \$18.1 million, excluding assets valued at less than \$10,000. The table calculating this value is attached.

The following table calculates a new Connection Fee. To be reasonable and conservative, the proposed Connection Fee only includes 75% of the estimated buy-in value of existing sewer pipelines and pump stations assuming 25% of these facilities do not have any remaining expansion capacity. The fee also includes 100% of the buy-in value for land and building improvements since these assets will provide equal benefit to all current and future customers. The fee is calculated by dividing total buy-in value by total capacity through build-out to determine an average cost per gpd. The unit cost is multiplied by the estimated wastewater flow of a new ESU resulting in a new Connection Fee of \$1,392 per ESU.

<b>Connection Fee Calculation</b>	
<b>Existing Wastewater System Buy-In Value</b>	
Land <sup>1</sup>	\$9,236,000
Land Improvements <sup>2</sup>	2,367,000
Building Improvements <sup>2</sup>	5,061,000
Jersey Island Pipeline <sup>2</sup>	1,429,000
75% of Sewer Pipelines <sup>2,3</sup>	18,873,000
75% of Pump Stations <sup>2,3</sup>	<u>2,910,000</u>
<b>Total</b>	<b>39,876,000</b>
<b>Total Buildout Capacity (mgd)</b>	<b>8.60</b>
<b>Buy-In Cost per Unit</b>	
\$ per mgd	\$4,636,744
\$ per gpd	4.64
Flow per EDU (gpd)	300
<b>Connection Fee (per ESU)</b>	<b>\$1,392</b>
<p>1 Original purchase price.  2 Replacement cost less depreciation.  3 Conservatively includes 75% of estimated current depreciated value.</p>	

## Combined Fees & Revenue Recovery

The following table compares the District's current and proposed development impact fees per ESU. These fees are designed to recover the full cost and/or value of assets and infrastructure required to serve new growth. The District does not anticipate using any General Fund or other revenue sources to fund new development's share of existing or required infrastructure or assets.

<b>Current &amp; Proposed Development Impact Fees</b>		
	Current	Proposed
<b>Development Impact Fees</b>		
Plant Capacity Fee	\$3,411.30	\$5,073.00
Trunk Line Capacity Fee	778.00	903.00
Connection Fee	<u>275.00</u>	<u>1,392.00</u>
<b>Subtotal</b>	<b>4,464.30</b>	<b>7,368.00</b>
<b>Other Fees</b>		
Inspection Fee	50.00	50.00
Permit Fee	20.00	20.00
Service Charge*	varies	varies
<b>Total</b>	<b>4,534.30</b>	<b>7,438.00</b>
* Paid with development impact fees based on months remaining in fiscal year.		

The amount of capacity fees due from each new connection would be based on the number of ESUs assigned to each new customer. The District assigns ESUs to new customers based on estimated wastewater flow and strength with each ESU representing the discharge of a typical single family residence, 300 gpd of domestic strength wastewater. In cases where a facility with an existing connection

is changing use, such as from a warehouse to a restaurant, or being redeveloped, the District reserves the right to charge capacity fees for the estimated increase in wastewater flow and/or strength..

Due to the unpredictable nature of growth, the District’s capacity fee revenues may vary widely from year to year. This may result in the District needing to temporarily use operating fund reserves and/or service charge revenues to fund capital projects or debt service that benefits new development. For example, with no growth, the District would not recover any capacity fees yet would still be responsible for funding the growth-related share of debt service for the new treatment and effluent disposal facilities. This could require the District to temporarily increase its service charges to cover the shortfall in capacity fee revenues. However, over the long run, the recommended fees should be adequate to fund 100% of growth-related capacity in the wastewater system provided growth continues in future years.

## Fee Survey

The following table and attached chart compare wastewater development impact fees for a typical single family residence or ESU to those of other regional agencies and comparable agencies that have financed major treatment plant expansions and/or upgrades in recent years. As shown on the table and chart, the proposed fees will be in the middle range of agencies surveyed.

Some agencies charge a range of fees depending on various factors such as location within an agency’s service area or number of bedrooms per dwelling unit. Many of the fees shown are from the 2005/06 fiscal year. A number of other agencies are also anticipating fee increases in the current or future fiscal years. These increases are not reflected in the table or chart. For example, Delta Diablo Sanitation District anticipates increasing its capacity fees within the next few months; this will result in higher fees in both Antioch and Pittsburg.

<b>Wastewater Development Impact Fees</b>	
<b>Agency</b>	<b>Typical Fees</b>
Ironhouse Sanitary District - Current	\$4,534
Ironhouse Sanitary District - Proposed	\$7,368
City of Brentwood	\$4,054 - \$6,318
Central Contra Costa Sanitary District	\$5,263 - \$6,667
City of Antioch <sup>1</sup>	\$5,948
Novato Sanitary District	\$6,340
City of Pittsburg <sup>1</sup>	\$6,915 - \$7,955
City of Rio Vista	\$7,238
City of Vacaville	\$7,438
City of Benicia	\$7,500
El Dorado Irrigation District	\$7,391 - \$9,223
Dublin San Ramon Services District	\$11,050
City of Ukiah & Ukiah Valley Sanitation District <sup>2</sup>	\$12,002
City of Calistoga	\$16,334
<p>1 Includes Delta Diablo Sanitation District fee for treatment.                  2 Assumes 3 bedrooms; fee per additional bedroom is \$1,901.                  Note: Other agencies will also be increasing fees in 2006/07.</p>	

## **Future Fee Updates**

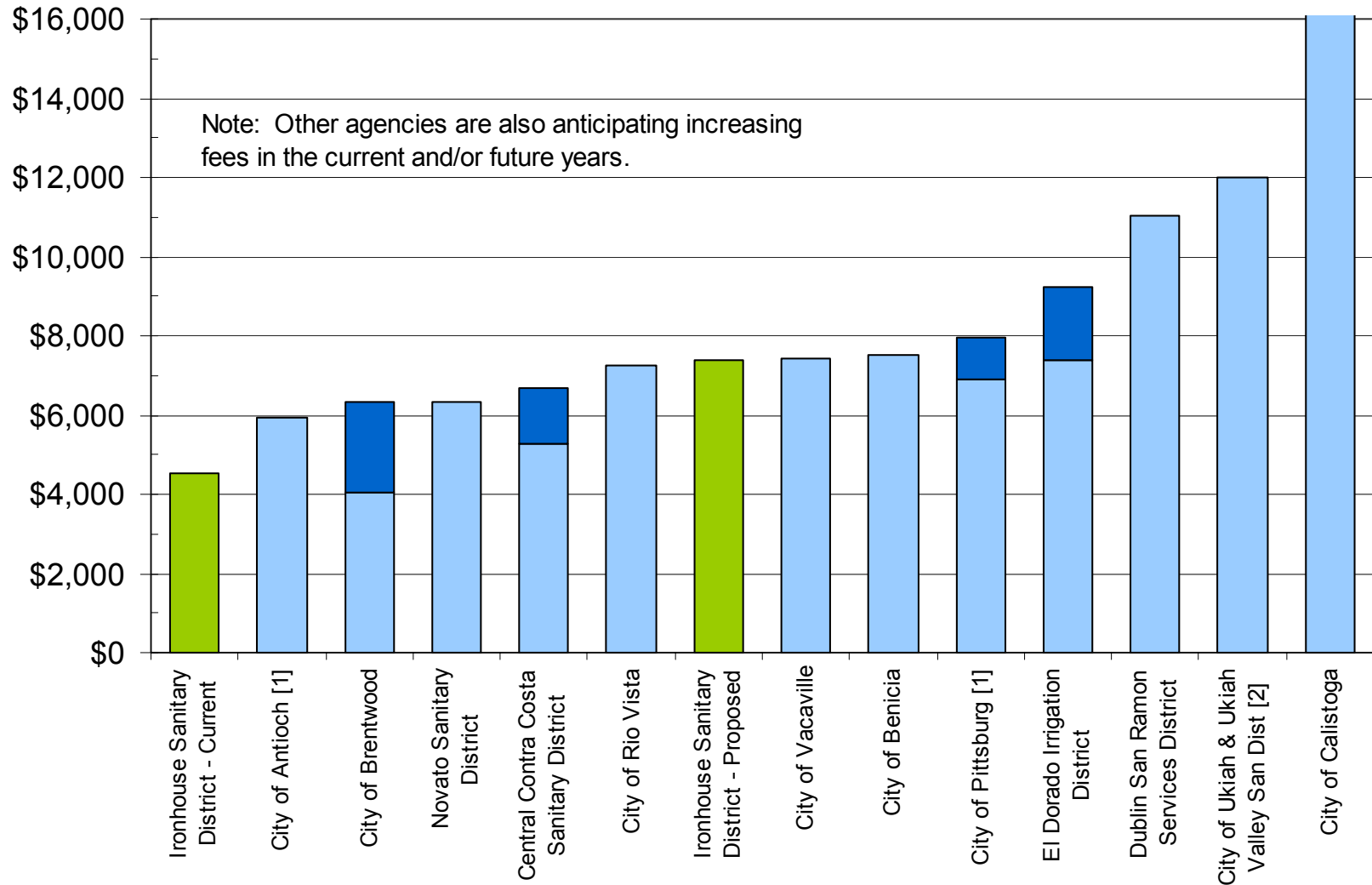
In future years, the District can adjust its capacity fees annually based on the change in the *Engineering News-Record* Construction Cost Index for the San Francisco Bay Area to keep the fees in line with construction cost inflation. BWA recommends that the District's ordinance allow fees be adjusted either a) based on the change in the index from a base year, or b) based on the change in the index from the prior fee update. This will enable the District to adopt a multi-year fee adjustment if an annual fee update is ever deferred or postponed.

BWA also recommends that the District update its capacity fees whenever needed to reflect significant changes in capital improvement costs, such as major revisions to the District's Sewer Master Plan or substantially revised cost estimates for the District's new wastewater treatment and effluent disposal facilities. In general, capacity fees should be independently reviewed and updated not less than once every five years to ensure the fees continue to accurately recover the costs of infrastructure required to serve growth.

BWA Shared/Jobs/Ironhouse Sanitary District/326F/Working Papers/Capacity Fee Update 8-24-06

# Wastewater Development Impact Fees

## Per Single Family Residence or Equivalent Service Unit



1 Includes local connection fee plus Delta Diablo Sanitation District treatment fee.

2 Assumes 3 bedroom residence, fee per additional bedroom is \$1,901.

**Ironhouse Sanitary District**  
**Current Depreciated Value of Other Fixed Assets**

Asset	Acquisition Year	Acquisition Cost	06/30/05 Accumulated Depreciation	Depreciated Book Value	ENR CCI Base Year <sup>1</sup>	ENR-CCI <sup>1</sup> April 2006 8555.30	Current Value Less Depreciation <sup>2,3,4</sup>	Included in Connection Fee <sup>5</sup>
<b>LAND #1400</b>								
PLANT AND ASSOCIATED COSTS	1983	2,154,716	0	2,154,716	-	-	2,154,716	2,154,716
SD15 PONDS	1992	88,582	0	88,582	-	-	88,582	88,582
IRONWOOD PUMP STATION	1990	28,750	0	28,750	-	-	28,750	28,750
JERSEY ISLAND	1993	3,929,804	0	3,929,804	-	-	3,929,804	3,929,804
J.I. APN:027-020-009 (Geranio)	1995	105,909	0	105,909	-	-	105,909	105,909
J.I. (Baek & Lee Property)	1996	1,108,019	0	1,108,019	-	-	1,108,019	1,108,019
APN: 027-020-010	1999	79,493	0	79,493	-	-	79,493	79,493
APN: 027-020-011	1999	85,601	0	85,601	-	-	85,601	85,601
Porter Estate	1992	1,655,000	0	1,655,000	-	-	1,655,000	1,655,000
TOTAL LAND #1400		9,235,873	0	9,235,873			9,235,873	9,235,873
<b>LAND/IMPROVEMENTS #1410</b>								
PLANT IMPROVEMENTS	1983	88,913	0	88,913	5,200	8,555	146,284	146,284
PORTER PROP/FIELD	1992	3,980	0	3,980	6,295	8,555	0	0
PORTER PROP/ROAD IMP.	1992	42,553	0	42,553	6,295	8,555	57,834	57,834
SOUNDWALL/HOFMANN	1994	17,197	0	17,197	6,530	8,555	22,530	22,530
JERSEY ISLAND/LAND LEVELING	2000	169,073	0	169,073	7,448	8,555	194,209	194,209
JERSEY ISLAND/LAND LEVELING	2002	298,669	0	298,669	7,644	8,555	334,255	334,255
JERSEY ISLAND/LAND LEVELING	2002	145,293	0	145,293	7,644	8,555	162,605	162,605
JERSEY ISLAND/LAND LEVELING	2004	144,159	0	144,159	7,996	8,555	154,237	154,237
JERSEY ISLAND/LAND LEVELING	2006	1,233,954	0	1,233,954	8,444	8,555	1,250,174	1,250,174
JERSEY ISLAND/RECYCLE PAD	2003	40,640	0	40,640	7,789	8,555	44,639	44,639
JERSEY ISLAND/RECYCLE PAD	2003	2,340	0	2,340	7,789	8,555	0	0
TOTAL LAND/IMPROVEMENTS #1410		2,186,772	0	2,186,772			2,366,768	2,366,768
<b>BUILDING IMPROVEMENTS #1500/1510/1520</b>								
TREATMENT PLANT (1) (#1500)	1984	6,376,633	3,317,189	3,059,444	5,300	8,555	4,938,578	
<i>Est. 25% of WWTP components to remain in use</i>							25%	1,234,645
CONVEYANCE SYSTEM (2) (#1500)	1984	1,703,216	893,782	809,434	5,300	8,555	1,306,595	1,306,595
ALARM AT PLANT (1) (#1500)	1992	1,800	563	1,238	6,295	8,555	0	0
ADMIN/SHOP (3) (#1500)	1992	112,888	35,277	77,610	6,295	8,555	105,480	105,480
ADMIN/SHOP (3) (#1510)	1993	1,949,542	560,493	1,389,049	6,478	8,555	1,834,489	1,834,489

**Ironhouse Sanitary District**  
**Current Depreciated Value of Other Fixed Assets**

Asset	Acquisition Year	Acquisition Cost	06/30/05 Accumulated Depreciation	Depreciated Book Value	ENR CCI Base Year <sup>1</sup>	ENR-CCI <sup>1</sup> April 2006 8555.30	Current Value Less Depreciation <sup>2,3,4</sup>	Included in Connection Fee <sup>5</sup>
ADMIN/SHOP (#1510)	1994	66,551	17,470	49,081	6,530	8,555	64,301	64,301
7 SHOP DOOR MOTORS (#1510)	1998	9,443	9,443	0	6,846	8,555	0	0
FUEL STATION (NEW) (#1510)	1998	6,313	6,313	0	6,846	8,555	0	0
INTERIM PLANT IMPROVE. (#1500)	1999	230,374	37,436	192,938	6,817	8,555	242,147	242,147
INTERIM PLANT IMPROVE. (#1500)	1999	34,501	5,175	29,326	6,817	8,555	36,805	36,805
JERSEY ISLAND OFFICES (#1520)	2001	24,847	8,696	16,151	7,399	8,555	18,674	18,674
JERSEY ISLAND HAY BARN (#1520)	2003	70,831	17,708	53,124	7,789	8,555	58,352	58,352
CHANNEL MONSTER (#1500)	2003	39,271	5,891	33,380	7,789	8,555	36,665	36,665
JERSEY ISLAND SHOP (#1520)	2004	58,660	2,200	56,461	8,228	8,555	58,704	58,704
JERSEY ISLAND HAY BARN (#1520)	2004	31,636	1,186	30,450	8,228	8,555	31,660	31,660
JERSEY ISLAND SHOP (#1520)	2005	14,071	176	13,895	8,555	8,555	13,895	13,895
JI SHOWER/LOCKED ROOM (#1520)	2005	18,462	231	18,232	8,555	8,555	18,232	18,232
<b>TOTAL BUILDING IMPROVEMENTS #1500 &amp; 1510</b>		<b>10,749,039</b>	<b>4,919,227</b>	<b>5,829,812</b>			<b>8,764,577</b>	<b>5,060,644</b>
<b>JI PIPELINE #1610</b>								
PIPELINE PROJECT COSTS	1997	655,874	139,373	516,501	6,731	8,555	656,488	656,488
PIPELINE PROJECT COSTS	1998	569,219	106,729	462,490	6,846	8,555	577,999	577,999
PIPELINE PROJECT COSTS	1999	184,705	30,015	154,690	6,817	8,555	194,144	194,144
<b>TOTAL JI PIPELINE #1610</b>		<b>1,409,798</b>	<b>276,116</b>	<b>1,133,682</b>			<b>1,428,631</b>	<b>1,428,631</b>
<b>GRAND TOTAL</b>		<b>23,581,482</b>	<b>5,195,344</b>	<b>18,386,138</b>			<b>21,795,849</b>	<b>18,091,915</b>

1 Engineering News-Record Construction Cost Index for San Francisco Bay Area.  
2 Depreciated value adjusted by change in ENR Index from acquisition year to June 2004.  
3 Does not include value of infrastructure that has been fully depreciated but is in working condition.  
4 Land & land improvements conservatively valued at original acquisition price.  
5 Excludes assets valued at less than \$10,000.  
Source: Ironhouse Sanitary District - Fixed Assets by Account 6/30/05.