CITY OF OAKLAND

AGENDA REPORT

TO: Office of the City Administrator
ATTN: Dan Lindheim
FROM: Community and Economic Development Agency
DATE: May 4, 2010

RE: **Supplemental Report Regarding A Resolution Of Intention To Amend Chapter 13 Of The Oakland Municipal Code Increasing The Sewer Service Charge, Initiating A Majority Protest Proceeding Under Article XIII-D Of The California Constitution, And Setting The Date For A Public Hearing To Consider The Sewer Service Charge Increase**

SUMMARY

On April 27, 2010, staff presented a resolution of intention to initiate the process of adopting increases in the sewer service charge. At that meeting, the members of the Public Works Committee directed staff to prepare a supplemental report to include the following:

1. An option to add an additional, fourth year, of 16% sewer service fee increases
2. A copy of the proposed public hearing notice
3. Detail of estimated costs for operations and maintenance (O&M) programs
4. Results expected from the additional O & M programs

This supplemental report is in response to those requests.

FISCAL IMPACT

The revised resolution adds an additional, fourth year, increase to the proposed rate structure increasing the sewer service charge sixteen percent (16%) in each year from January 2011 through January 2014. Following January 2015, the rate is proposed to increase at an amount based on the Consumer Price Index (CPI) of the San Francisco Bay Area. A table showing the proposed revenues and expenditures for this 4-year period is shown on revised ***Attachment C***.

KEY ISSUES AND IMPACTS

1. *Option to Add an Additional, Fourth Year, Increase*

The Public Works Committee members expressed concerns that the proposed 3-year increases might not be enough to fully fund the EPA mandates. For this reason, the members directed staff to add an additional fourth year increase, as an option for consideration and discussion by the

Council. In response to this request, staff has revised the attached resolution of intention and added a fourth year increase in 2014, as an alternative to the original resolution. The revised resolution will increase the sewer service charge by sixteen percent (16%) in each year from January 2011 through January 2014. Beginning January 2015, the rate is proposed to increase at an amount based on the Consumer Price Index (CPI) of the San Francisco Bay Area. The table below shows the rate increase for a Single Family Dwelling for each year through 2014.

Year	SFD Rate
Current	$22.24
2011	$25.80
2012	$29.93
2013	$34.71
2014	$40.26

A table showing the proposed revenues and expenditures for this 4-year period is shown on revised ***Attachment C***.

2. Copy of the Public Hearing Notice

At the time of writing of this report, the public notice is under review by various city agencies. A draft copy is shown as ***Attachment D***.

3. Detail of Estimated Costs for Operations and Maintenance Programs

In response to this request, ***Attachment C*** from the Committee report has been revised. The revised copy is attached, with annotations providing details of the proposed estimates.

4. Results Expected From the Additional Operations & Maintenance Programs

The Committee members directed staff to describe the anticipated impacts of the additional operations and maintenance programs and what the public will see as a result of the improvements.

Sanitary sewer overflows pose a serious concern to the public health and the environment. A complete response to the Committee's question has to include a discussion on what the public will not see if the needed programs are fully funded in order to minimize the risk of sanitary sewer overflows. The public will see additional maintenance activities on the streets and easements as crews clean and inspect the public sewers and assure the system is more

dependable and reliable. Photos of actual sewer cleaning work sites are included on ***Attachment F.*** And as a result, the public will experience fewer unsightly sewer overflows, which can damage private properties and public properties such as our parks, creeks, and the Bay. Sample Photos of overflowing manhole structures are shown on ***Attachment G.***

ACTION REQUESTED OF THE CITY COUNCIL

It is requested that the City Council approve the resolution of intent to increase the sewer service fee and initiate a majority protest proceeding.

Respectfully submitted,

Walter S. Cohen, Director
Community and Economic Development Agency

Reviewed by:
Michael Neary, P.E., Deputy Director,
CEDA, Department of Engineering and Construction

Prepared by:
Gus Amirzehni, P.E., Division Manager,
Engineering Design & R.O.W. Management Division

APPROVED AND FORWARDED TO THE CITY COUNCIL:

Office of the City Administrator

Item: _____
City Council
May 4, 2010

Attachment "C"
Revised

Fund 3100 Projected Cash Flow -- 4 Yr Fee Increase -- Proposed
5/27/2010

	2010-11	2011-12	2012-13	2013-14
Beginning Fund Balance (estimated)	6,966,000	4,879,000	248,000	1,393,000
Revenues				
Service Charge	37,744,000	43,783,000	50,788,000	58,914,000
Other Revenue	3,314,000	3,347,000	3,380,000	3,414,000
Totals:	**41,058,000**	**47,130,000**	**54,168,000**	**62,328,000**
Expenditures				
Current Personnel and O&M	27,071,000	27,883,000	28,719,000	29,581,000
Franchise Fee	3,774,000	4,378,000	5,079,000	5,891,000
Current Debt Services	5,400,000	5,400,000	5,400,000	5,400,000
Rate Stabilization Fund (1)	-	500,000	500,000	500,000
Flow Monitoring (2)	1,500,000	1,500,000	-	-
Emergency Repairs	-	1,500,000	2,500,000	5,000,000
New Equipment (3)	2,100,000	-	-	-
New Personnel and O&M (4)	3,300,000	7,500,000	7,725,000	10,000,000
New Debt Service (5)	-	3,100,000	3,100,000	3,100,000
Totals:	**43,145,000**	**51,761,000**	**53,023,000**	**59,472,000**
Ending Fund Balance (estimated)	4,879,000	248,000	1,393,000	4,249,000

Notes:
(1) The sewer fund is required to maintain a Rate Stabilization Fund for issuing sewer revenue bonds.

(2) A separate action item will be presented to the council in June detailing this expenditure and the needed professional services from a consulting firm to respond to the AO requirements including flow monitoring.

(3) A consultant report entitled Sewer Maintenance Cost Estimates for Administrative Order Compliance, prepared by RMC Water and Environment Consultants and dated March 11, 2010 is included as Attachment "E". New equipment costs are detailed in Table 3-10 of that report.

(4) A consultant report entitled Sewer Maintenance Cost Estimates for Administrative Order Compliance, prepared by RMC Water and Environment Consultants and dated March 11, 2010 is included as Attachment "E". New personnel and O&M costs are detailed in Table 4-1, 5-3, and 6-1 of that report.

(5) The new debt service is an estimated amount based on the projected market conditions provided by the Finance and Management Agency, Treasury Division.

May 2010 **DRAFT**

CITY OF OAKLAND
PUBLIC WORKS AGENCY

Notice of Public Hearing on Proposed Increase in Sewer Service Charges

Tuesday, July 6, 2010, 7:00 p.m.
Council Chambers, City Hall
One Frank H. Ogawa Plaza, Oakland

The City Council of the City of Oakland will hold a public hearing on the proposed increase in the sewer service charges

The City of Oakland provides your wastewater collection (sewer) service that is essential to public health and a healthy environment. A clean and efficient sewer system prevents sewer overflows in our community and keeps pollution from entering our creeks, Lake Merritt and the Bay.

The City funds this service by collecting a sewer service charge on each property that is connected to the City's sewer system. It is billed and collected by the East Bay Municipal Utility District (EBMUD) with your bi-monthly water bill. With these funds, the City operates over 1,000 miles of sewer line and 28,000 manholes. Much of the system is over 80 years old. On average, the City builds, replaces or rehabilitates ten miles of sewer line each year. In the last 23 years, this sewer fund has provided more than $190 million in capital improvements to almost 250 miles of pipeline, resulting in a significantly improved sanitary sewer collection system. However, we are required by EPA to do more.

Why Increase Rates Now?

During the past two years, the EPA, the U.S. Department of Justice and the San Francisco Regional Water Quality Control Board have made significant changes in wastewater collection system requirements. The EPA now is requiring Oakland to begin a Sewer System Improvement Program that features new, more aggressive maintenance programs and an additional long-term capital improvement program. These new programs are required to further reduce sanitary sewer overflows and wet weather related peak flows.

In order to meet the more stringent EPA requirements, consultants recommend that the City double its sewer maintenance activities. Similarly, Oakland must increase its on-going sewer construction program. To meet these challenges, Oakland's sewer service charge has to be increased over the next three years. Adoption of the sewer service charge increase will assure the sewer fund has sufficient money to fund the increased maintenance activities.

How Much Increase?

Under this proposal, all user rates will increase 16% each year from January 2011 to January 2014. An owner of a single family home, currently paying $22.44 per month, will pay $3.56 more ($25.80) in 2011. By 2014, this rate would be $40.26. Beginning January 2015, the annual increases will be limited to the Consumer Price Index. Multi-family, commercial and industrial owners will pay similar rate increases, according to the schedule on the reverse of this notice. If adopted, the increased charges will begin with EBMUD's first billing period following January 2011.

Attachment "D"

Your sewer service charge pays for sewer construction projects and system maintenance. We strive to keep costs low.

- *We use state-of-the-art replacement & rehabilitation technologies*
- *We apply nationally recognized maintenance techniques to improve reliability and dependability*
- *We participate in a statewide benchmarking study to evaluate and reduce our costs*
- *We continuously seek opportunities to improve service, lower costs, and increase efficiency*

The Public Works Agency is accredited by the American Public Works Association. This recognizes that our services meet or exceed Best Business Practices.

The proposed increase in the sewer service charge will help to provide a more reliable and dependable wastewater collection service while protecting our creeks, the Bay, and your health.

*Under the proposed rate increases, a single family household will pay just **12 cents** more per day in 2011.*

DRAFT

Monthly Sewer Service Charges
(January 2011 Proposed Rates)

Type of Occupancy	Current Charge	Proposed Increase	New Charge in 2011
Residential:			
Single-Family Residence	$ 22.24	$3.56	$ 25.80
Duplexes	$ 24.96	$3.99	$ 28.95
Triplexes	$ 37.44	$5.99	$ 43.43
Fourplexes	$ 49.93	$7.99	$ 57.92
Residential premises not listed above	$ 1.52/100 cu. ft.	$.24/100 cu. ft.	$ 1.76/100 cu. ft.
Commercial – Charge based upon quantity of water used:			
Restaurants/Hotels	$ 1.57/100 cu. ft.	$ 0.25/100 cu. ft.	$ 1.82/100 cu. ft.
Hospitals	$ 1.69/100 cu. ft.	$ 0.27/100 cu. ft.	$ 1.96/100 cu. ft.
Laundromats/Carwashes	$ 1.78/100 cu. ft.	$ 0.28/100 cu. ft.	$ 2.06/100 cu. ft.
All others	$ 1.52/100 cu. ft.	$ 0.24/100 cu. ft.	$ 1.76/100 cu. ft.
Industrial – Charge based upon quantity of water used:			
Industrial Accounts	$ 1.38/100 cu. ft.	$ 0.22/100 cu. ft.	$ 1.60/100 cu. ft.
Properties with Sewage Meter	$ 1.84/100 cu. ft.	$0.29/100 cu. ft.	$ 2.13/100 cu. ft.
Minimum rate for any property	$22.24	$3.56	$25.80

Written protests on the proposed increase in the monthly sewer service charges may be mailed or delivered to the City Clerk at One Frank H. Ogawa Plaza, First Floor, Oakland, CA 94612, and must identify the owner(s) of the property or properties. Protests must be received prior to the close of the Public Hearing on July 6, 2010. E-mail protests will not be accepted. If written protests are presented by owners of a majority of parcels, the City Council cannot approve the increase.

For more information on proposed sewer service charge increases, please call: (510) 238-6997

Para mas informacion en Español sobre la tarifa del *Servicio de Drenje* favor de llamar al: (510) 238-6997

有關排污水月費，請電: (510) 238-6997

City Of Oakland
Public Works Agency, Department of Engineering and Construction
250 Frank H. Ogawa Plaza, Suite 4314
Oakland, CA 94612-2033

Important Notice – Sewer Service Charge Increase

Attachment "E"

CITY OF
OAKLAND

Public Works Agency
Department of Infrastructure and Operations

Sewer Maintenance Cost Estimates for Administrative Order Compliance

Final Report

Prepared by:

RMC
Water and Environment

March 11, 2010

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APPENDICES

Chapter 1 Overview

In November 2009, the City of Oakland received an Administrative Order from USEPA Region 9. The Administrative Order identifies a set of compliance requirements. This document summarizes cost estimates for requirements included in the Administrative Order directly impacting the staffing and equipment required for Sewer Maintenance operations.

Chapter 2 Administrative Order Impacts to Sewer Maintenance

The requirements in the Administrative Order directly impacting Sewer Maintenance are listed in Table 2-1.

Table 2-1: Administrative Order Requirements Impacting Sewer Maintenance

Administrative Order Section	Requirement for Compliance	Impact to Sewer Maintenance Operations
I.B.1 Asset Management Program - Sewer Pipe and Maintenance Hole Inspection	Identification of inspection methods and plan for inspection equipment. Inspection schedule and protocols for determining inspection frequency. System for timely evaluation and condition assessment.	Acquire new inspection equipment. Develop schedule and protocols for inspection frequency. Implement system for timely evaluation and condition assessment.
I.B.2 Asset Management Program - Sewer Cleaning Program and Root Control Program	Schedule for routine cleaning or inspection of entire system. Identification of hot spots, hot spot cleaning schedule, and process to adjust hot spot cleaning frequency. Identification of locations with root intrusion issues. Schedule for application of root control methods. Plan for staffing sewer system cleaning and root control program.	Increased sewer cleaning and chemical root control. Additional staffing and equipment required.
IV. Inflow Identification and Elimination	Requires methods to identify and eliminate sources of inflow. Develop and use method to identify areas for routine I/I testing. Schedule for routine testing.	Assume Engineering responsible for compliance with this requirement.
V. Overflow Response, Recordkeeping, Notification, & Reporting	Emergency response training. Emergency equipment to ensure adequate response time and maximum recovery.	Improved response time and spill recovery. Assume purchase of spill response trailer and containment equipment.

Table 2-2: Administrative Order Requirements Impacting Sewer Maintenance (cont'd)

Administrative Order Section	Requirement for Compliance	Impact to Sewer Maintenance Operations
VII. Data Management – Maintenance Management System	Requires implementation of computerized maintenance management system linked with GIS.	Assume purchase and implementation of moderately sophisticated CMMS.
VIII. Sewer Cleaning and Root Control Program	Regular cleaning of sewer system. Criteria and identification of high priority locations. Two-tiered schedule with high priority cleaned on 10-year schedule.	Increased sewer cleaning and chemical root control. Additional staffing and equipment required.
IX. Sewer Pipe and Maintenance Hole Inspection	Periodic inspection of all mains and manholes on two-tiered schedule. Use criteria to identify high priority mains and manholes. Inspect minimum of 10 percent of the high priority mains and manholes annually. Assess condition of pipes following blockage-related overflows. Identify mains requiring emergency repairs. Estimation of miles of pipes and maintenance holes to be inspected each year for next two years.	Increased sewer inspection and condition assessment. Additional staff and equipment. Increases in quantity of repairs.

Chapter 3 Staffing and Equipment Estimates

3.1 Methodology

The amount of staffing required for compliance with the Administrative Order was estimated using a workload projection methodology. Workload was projected for all major sewer maintenance activities. A workload projection model was created in Microsoft Excel. The majority of activities performed by a collection system O&M organization are major activities such as system-wide and preventive maintenance sewer cleaning, systematic sewer inspection, emergency sewer repairs, and pump station maintenance. The quantity of each of these activities are estimated based on the known current needs of the collection system O&M program or the predicted future needs of the program based on the Administrative Order. The number of hours are estimated by multiplying a unit productivity or target production value by the crew size and/or target crew hours per event. Finally, an estimate is calculated for the average number of productive hours the City can expect from an employee. The number of staff needed is calculated by dividing the number of workload hours by the number of productive hours expected per employee.

In addition, every collection system O&M organization will spend a portion of the time performing "unaccounted" activities that are too numerous to estimate using a workload estimating model. The total amount of this smaller portion of activities are estimated by building a staffing model that estimates the current activities performed versus the existing staffing available. By estimating the quantity of hours and the number of staff needed currently to perform major activities, the amount of hours and the amount of

staff currently needed to perform the "unaccounted" activities can be estimated. This amount is assumed constant in future years.

3.2 Maintenance Activities Required for Compliance

Based on the requirements identified in the Administrative Order, the following assumptions were made for the amount of sewer cleaning and inspection required for compliance with the Administrative Order. Table 3-1 lists the requirements associated with sewer cleaning. Table 3-2 lists the requirements associated with sewer inspection. Table 3-3 summarizes the projected miles of sewer cleaning anticipated for hot spot cleaning, routine system-wide cleaning, cleaning to support CCTV inspection, and follow-up cleaning activities.

Table 3-1: Administrative Order Requirements Impacting Sewer Cleaning Workload

Administrative Order Section	Requirement for Compliance	Impact to Sewer Maintenance Operations
I.B.2 Asset Management Program - Sewer Cleaning Program and Root Control Program VIII. Sewer Cleaning and Root Control Program	Regular cleaning of sewer system. Schedule for routine cleaning or inspection of entire system.	Assume minimum 10-year cleaning schedule for entire system.
	Identification of hot spots, hot spot cleaning schedule, and process to adjust hot spot cleaning frequency.	Assume 20 percent of system will be on hot spot schedule with average 9-month cleaning frequency.
	Identification of locations with root intrusion issues. Schedule for application of root control methods.	Assume annual $1 million contract to perform chemical root control.
	Criteria and identification of high priority locations. Two-tiered schedule with high priority cleaned on 10-year schedule.	Assume all O&M activities performed by agency staff (other than root control and I/I testing).

Table 3-2: Administrative Order Requirements Impacting Sewer Inspection Workload

Administrative Order Section	Requirement for Compliance	Impact to Sewer Maintenance Operations
IX. Sewer Pipe and Maintenance Hole Inspection	Periodic inspection of all mains and manholes on two-tiered schedule.	
	Use criteria to identify high priority mains and manholes. Inspect minimum of 10 percent of the high priority mains and manholes annually.	Assume minimum 10-year inspection schedule for entire system.
	Assess condition of pipes following blockage-related overflows.	Assume approximately 100 miles of sewer inspection and 2,200 manhole inspections annually.
	Identify mains requiring emergency repairs.	Assume roughly two-fold increase in sewer repairs performed.

Table 3-3: Projected Miles of Sewer Cleaning By Cleaning Program and Cleaning Method

	Cleaning Method				
Cleaning Program	Drag	Hand Rod	Power Rod	Flush	Total
Hot Spot Cleaning		45	88	132	266
System-wide Cleaning	7	18	24	35	84
CCTV Support Cleaning			14	10	24
Follow-Up Cleaning			8	11	20
Total	**7**	**63**	**134**	**189**	**393**

3.3 Workload Assumptions

3.3.1 Assets Maintained

The workload forecast was developed for activities consistently performed by Sewer Maintenance to maintain collection system assets. Table 3-4 identifies the collection system assets that Sewer Maintenance is responsible for maintaining.

Table 3-4: Types and Quantities of Assets Maintained

Asset Class	Quantity	Units
Sewer Mains <=18"	711	miles
Sewer Mains <=18" in easements	249	miles
Sewer Mains > 18"	72.5	miles
Total Gravity Mains	**1032.5**	**miles**
Sewer Manholes	21810	structures
Force Mains	0.25	miles
Lateral Connections	96,969	connections
Pump Stations	7	stations
Drypit/Wetwell (5 to 30 hp)	4	stations
Submersibles (2 to ? hp)	3	stations

3.3.2 Productive Hours Available Per Employee

Staffing estimates also assume 1,540 productive hours per full-time equivalent employee. Table 3-5 includes the assumptions for amount of hours per year attributed to non-productive activities (vacation, sick, holiday, training, etc.) inherent in this assumption.

Table 3-5: Assumptions for Productive Hours Available for Full-Time Equivalent Employee

Non-Productive Time	Hours
Vacation	100
Sick	78
Holiday	104
Furlough	96
Training (Safety, Diversity, Technical)	56
Total Non-Production Hours per Employee	**538**
Total Hours Available	**2080**
Production Time Available (Total minus Non-Production)	**1,542**

3.3.3 Productivity Assumptions for Major Activities

The workload and staffing estimates include productivity assumptions for all activities included in the analysis. The productivity assumptions for major activities are included in Table 3-6.

Table 3-6: Productivity Assumptions for Major Activities

Activity	Assumed Productivity	Crew Size
Hand Rodding	500 feet/day	3
Power Rodding	1,000 feet/day	2
Hydroflushing	1,300 feet/day	2
CCTV Inspection	750 feet/day	2
Manhole Inspection	4 manholes/hour	2
Main Repair	16 hours/repair	5
Root Control Contractor Inspection	3,000 feet/day	1

Staffing projections were compared to existing staffing levels and a staffing gap was calculated for each activity performed. The assumptions for existing staffing levels are shown in Table 3-7.

Table 3-7: Assumptions for Existing Staffing Levels

Activity Type	Activity	FTEs
Management/Supervisiuon	PW Supervisor II	1
Management/Supervisiuon	PW Supervisor I	3
Admin Support	Admin Support	1
Service Calls/ Pump Stations	Complaint Truck	10
Sewer Cleaning	Power Rodder	9
Sewer Cleaning	Hydro Flusher	4
Sewer Cleaning	Drag Machine	
Sewer Inspection	CCTV	8
Sewer Repair	Construction Crew	6
Subtotal	Subtotal	42

3.4 Staffing Estimate Results

Staffing estimates were calculated for activities performed by Sewer Maintenance and the number of full-time equivalent employees was calculated for each activity by employee classification. Appendix A includes detailed workload and staffing calculations by maintenance activity and compares existing staffing with projected staffing required. Table 3-8 contains a summary of staffing projections by position classification and activity category. Table 3-8 also includes an estimate of annual labor costs for projected positions.

Table 3-8: Projected Staffing Required for Compliance with Administrative Order

Activity	PW Sup II	PW Sup I	Sewer Maint Leader	Sewer Maint Worker	Hvy Equip Operator	Truck Driver	Maintenance Planner	Admin Asst I	Total
Customer Service	0.0	0.0	3.0	1.9	0.0	0.0	0.0	0.0	**4.8**
Sewer Cleaning	0.0	0.0	12.3	15.7	0.0	0.0	0.0	0.0	**28.0**
Sewer Inspection - CCTV and Manholes	0.0	0.0	3.7	3.9	0.0	0.0	0.0	0.0	**7.6**
Sewer Repairs	0.0	0.0	3.0	6.0	2.0	2.0	0.0	0.0	**12.9**
Pump Stations	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	**0.6**
Other Activities	0.0	0.0	4.7	4.6	0.0	0.0	0.0	0.0	**9.4**
Supervision	1.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	**6.0**
Maintenance Planning	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	**2.0**
Data Entry/Admin Support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	**1.0**
TOTALS	**1.0**	**5.0**	**27.1**	**32.5**	**2.0**	**2.0**	**2.0**	**1.0**	**72.3**
Hourly Rate	**$40.03**	**$34.58**	**$30.53**	**$24.46**	**$29.56**	**$27.00**	**$35.00**	**$20.00**	
Annual Position Cost w/ OH	**$211,501**	**$182,697**	**$161,296**	**$129,227**	**$156,171**	**$142,646**	**$369,824**	**$105,664**	
Total Costs w OH – All Positions	**$211,501**	**$913,486**	**$4,032,402**	**$3,876,812**	**$312,343**	**$285,293**	**$369,824**	**$105,664**	**$10.73M**

Table 3-9 includes a comparison of staffing projections versus existing staffing for each maintenance activity category.

Table 3-9: Comparison of Staffing Required to Existing Staffing

Activity	Existing FTEs	Projected FTEs		Projected Additional FTEs Required [Projected minus Existing]
Customer Service	4.8	4.8		0
Sewer Cleaning	16.3	28		11.7
Sewer Inspection – CCTV and Manholes	5.8	7.6		1.8
Sewer Repairs	6.6	12.9		6.3
Other Activities	7.1	9.4		2.3
Pump Stations	0.5	0.6		0.1
Supervision	3	6		3
Maintenance Planning	0	2		2
Data Entry/Admin Support	1	1		0
TOTAL (includes OT)	45	72.3		27.3
TOTAL (w/o OT)	**42**	**68**		**26**

3.5 Equipment Cost Estimates

Equipment costs were estimated for each sewer maintenance activity based on the workload performed. Table 3-10 summarizes the equipment required for compliance with the Administrative Order including a cost estimate for the additional equipment needed beyond existing equipment.

Table 3-10: Equipment Required for Compliance with Administrative Order

Activity	Complaint Truck	Power Rodder	Combination Flusher	Drag Winches	CCTV Truck & Equipment	Backhoe	Crew Truck	Pick-Up Truck	Dump Truck	Supervisor Vehicle
Customer Service	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sewer Cleaning	3.4	3.9	4.2	0.4	0.0	0.0	0.0	0.4	0.4	0.0
Sewer Inspection - CCTV and Manholes	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.5	0.0	0.0
Sewer Repairs	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	1.5	0.0
Pump Stations	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Other Activities	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Supervision	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	5.0
TOTALS	**6.9**	**3.9**	**4.2**	**0.4**	**3.2**	**3.0**	**3.3**	**2.6**	**1.9**	**5.0**
REQUIRED	**7**	**4**	**5**	**1**	**4**	**3**	**4**	**3**	**2**	**5**
CURRENT	**4**	**3**	**3**	**1**	**3**	**1**	**1**	**1**	**2**	**3**
GAP	**3**	**1**	**2**	**0**	**1**	**2**	**3**	**2**	**0**	**2**
Annual Cost/Unit	**$22,000**	**$60,000**	**$94,000**	**$27,000**	**$55,000**	**$24,000**	**$18,000**	**$14,000**	**$25,000**	**$9,000**
Purchase Cost/Unit	**$50,000**	**$240,000**	**$400,000**	**$110,000**	**$225,000**	**$100,000**	**$70,000**	**$50,000**	**$80,000**	**$40,000**
Total Purchase Cost of Additional Equipment	**$150,000**	**$240,000**	**$800,000**	**$0**	**$225,000**	**$200,000**	**$210,000**	**$100,000**	**$0**	**$80,000**

TOTAL PURCHASE COST OF NEW EQUIPMENT: $2,005,000

TOTAL ANNUAL COST OF NEW EQUIPMENT (incl. maintenance, fuel, etc): $517,000

TOTAL ANNUAL COST OF ALL EQUIPMENT (incl. maintenance, fuel, etc.): $1,390,000

Chapter 4 Other Annual Costs Associated with Administrative Order Compliance

Table 4-1 includes estimates for annual costs associated with additional data management, chemical root control, sewer cleaning effectiveness training, and sewer cleaning quality assurance and quality control.

Table 4-1: Summary of Other Annual Costs for AO Compliance

Administrative Order Section	Assumption	Cost Estimate
VII. Data Management – Maintenance Management System	The Sewer Fund will be charged annually for CMMS maintenance.	$20,000 annually
VIII. Sewer Cleaning and Root Control Program	City will identify additional areas for chemical root control.	$1,000,000 annually
VIII. Sewer Cleaning and Root Control Program	City will provide specialized sewer cleaning practices training for all cleaning crews	$50,000 annually for three years.
VIII. Sewer Cleaning and Root Control Program	City will hire a contractor to perform sewer cleaning QA/QC inspections.	Approximately 12 miles of inspection annually costing approximately $65,000.

Chapter 5 Summary of Annual Costs

This section summarizes annual and one-time cost estimates for all activities related to EPA Administrative Order compliance. In addition, the City requested cost estimates for implementation of an Fats, Oils, and Grease (FOG) Control Program. FOG Control Program costs estimates are detailed in Appendix B. Cost assumptions for this analysis are included in Appendix C. Estimates of unit costs for activities performed by City sewer maintenance crews are detailed in Appendix D. Table 5-1 summarizes the current sewer operations and maintenance budget by activity.

Table 5-1: Summary of Current Annual Costs By Activity

Activity	Labor Total	Equipment Total	Contract Cost	Total Cost
Customer Service	$709,000	$63,000	$0	$772,000
Sewer Cleaning	$2,357,000	$505,000	$0	$2,862,000
Sewer CCTV Inspection	$839,000	$165,000	$0	$1,004,000
Sewer Repairs	$930,000	$92,000	$0	$1,022,000
Pump Station O&M	$78,000	$18,000	$0	$96,000
Chemical Root Control	$0	$0	$0	$0
Fats, Oils, and Grease Control Program	$0	$0	$0	$0
Other Field Activities	$1,029,000		$0	$1,029,000
Supervision	$577,000	$41,000	$0	$618,000
Maintenance Planning	$0		$0	$0
Administrative Support/Data Entry	$106,000		$0	$106,000
	$6,625,000	***$884,000***	***$0***	***$7,509,000***
Other Costs			**$0**	**$191,000**
TOTAL COSTS	**$6,625,000**	**$884,000**	**$0**	**$7,700,000**

Table 5-2 is a summary of the total sewer operations and maintenance annual costs associated with EPA Administrative Order compliance. Table 5-3 is a summary of the additional costs that the EPA Administrative Order will cost the City. Table 5-3 was generated by subtracting current annual costs (Table 5-1) from total estimated annual costs (Table 5-2). Both Table 5-2 and Table 5-3 include an additional cost of 5 percent certification pay for all field employees to achieve CWEA Collection System Maintenance Certification.

Table 5-2: Summary of Estimated Total Annual Cost for Administrative Order Compliance

Activity	Labor Total	Equipment Total	Contract Cost	5% Certification Pay	Total Cost	10% Contingency on Additional AO Costs	Total Cost (w/ 10% contingency on additional AO costs)
Customer Service	$709,000	$63,000	$0	$35,000	$807,000	$3,500	$811,000
Sewer Cleaning	$4,008,000	$826,000	$65,000	$200,000	$5,099,000	$223,700	$5,323,000
Sewer CCTV Inspection	$1,104,000	$220,000	$0	$55,000	$1,379,000	$37,500	$1,417,000
Sewer Repairs	$1,254,000	$176,000	$0	$63,000	$1,493,000	$47,100	$1,540,000
Pump Station O&M	$93,000	$18,000	$0	$5,000	$116,000	$2,000	$118,000
Chemical Root Control	$0	$0	$1,000,000	$0	$1,000,000	$100,000	$1,100,000
Fats, Oils, and Grease Control Program	$962,000	$73,000	$0	$0	$1,035,000	$103,500	$1,139,000
Other Field Activities	$1,367,000	$29,000	$0	$68,000	$1,464,000	$43,500	$1,508,000
Supervision	$1,125,000	$59,000	$0	$0	$1,184,000	$56,600	$1,241,000
Maintenance Planning	$370,000	$0	$20,000	$0	$390,000	$39,000	$429,000
Administrative Support/Data Entry	$106,000	$0	$0	$0	$106,000	$0	$106,000
	$11,098,000	**$1,464,000**	**$1,085,000**	**$426,000**	**$14,073,000**	**$656,400**	**$14,729,000**
Other Costs (Misc. Budget Line Items)	**$0**	**$0**	**$0**	**$0**	**$382,000**	**$19,100**	**$401,000**
TOTAL COSTS	**$11,098,000**	**$1,464,000**	**$1,085,000**	**$426,000**	**$14,455,000**	**$675,500**	**$15,131,000**

Table 5-3: Summary of Estimated Total Annual Cost for Administrative Order Compliance Minus Annual Current Costs

Activity	Labor Total	Equipment Total	Contract Cost	5% Certification Pay	Total Cost	10% Contingency on Additional AO Costs	Additional AO Cost (w/ 10% contingency)
Customer Service	$0	$0	$0	$35,000	$35,000	$3,500	$39,000
Sewer Cleaning	$1,651,000	$321,000	$65,000	$200,000	$2,237,000	$223,700	$2,461,000
Sewer CCTV Inspection	$265,000	$55,000	$0	$55,000	$375,000	$37,500	$413,000
Sewer Repairs	$324,000	$84,000	$0	$63,000	$471,000	$47,100	$518,000
Pump Station O&M	$15,000	$0	$0	$5,000	$20,000	$2,000	$22,000
Chemical Root Control	$0	$0	$1,000,000	$0	$1,000,000	$100,000	$1,100,000
Fats, Oils, and Grease Control Program	$962,000	$73,000	$0	$0	$1,035,000	$103,500	$1,139,000
Other Field Activities	$338,000	$29,000	$0	$68,000	$435,000	$43,500	$479,000
Supervision	$548,000	$18,000	$0	$0	$566,000	$56,600	$623,000
Maintenance Planning	$370,000	$0	$20,000	$0	$390,000	$39,000	$429,000
Administrative Support/Data Entry	$0	$0	$0	$0	$0	$0	$0
	$4,473,000	**$580,000**	**$1,085,000**	**$426,000**	**$6,564,000**	**$656,400**	**$7,220,000**
Other Costs (Misc. Budget Line Items)	**$0**	**$0**	**$0**	**$0**	**$191,000**	**$19,100**	**$210,000**
TOTAL COSTS	**$4,473,000**	**$580,000**	**$1,085,000**	**$426,000**	**$6,755,000**	**$675,500**	**$7,431,000**

Chapter 6 Summary of One-Time Costs

Table 6-1 includes estimates for one-time costs associated with additional overflow response equipment, data management, and CCTV inspection certification. The CCTV inspection certification is provided by the National Association of Sewer Service Companies (NASSCO) in the Pipeline Assessment and Certification Program (PACP). This is a national standard for CCTV sewer inspection.

Table 6-1: Summary of Other One-Time Costs for AO Compliance

Administrative Order Section	Assumption	Cost Estimate
V. Overflow Response, Recordkeeping, Notification, & Reporting	Purchase of spill response trailer and containment equipment.	$50,000 one-time cost.
VII. Data Management – Maintenance Management System	Potential modifications to Azteca Cityworks CMMS	$40,000 one-time cost.
IX. Sewer Pipe and Maintenance Hole Inspection	City will require all CCTV inspection crews to be NASSCO PACP certified	$10,000 one-time cost

Appendix A - Detailed Workload and Staffing Calculations By Maintenance Activity – Existing Staffing Versus Projected Staffing

DETAILED WORKLOAD/STAFFING ESTIMATE BY ACTIVITY - EXISTING STAFFING VERSUS PROJECTED

Functional Area	Activity	Current Annual	Target Annual Quantity	Units	Current Production (feet/day)	Target Production (feet/day)	Current Crew Size	Target Crew Size	Crew Hours per Event	Target Crew Hours per Event	Current Annual Labor Hours	Target Annual Labor Hours	Current FTEs (@1,540 hours/year)	Target FTEs (@1,540 hours/year)	Gap	Comments
Service Calls	Complaint Investigations	3005	3005	events			1	1	0.5	0.5	1,502	1,502	1.0	1.0	0.0	Assumes 60% during working hours
	Hand Rodding	5	5	miles	500	500	3	3			1,267	1,267	0.8	0.8	0.0	
	Dye Tests	445	445	events			2	2	2	2	1,781	1,781	1.2	1.2	0.0	
	SSO Containment	100	100	events			2	2	3	3	600	600	0.4	0.4	0.0	
	Tap Inspections	344	344	events			1	1	1	1	344	344	0.2	0.2	0.0	
	S/S Reports	222	222	events			1	1	2	2	444	444	0.3	0.3	0.0	
	Street Depression Investigation and Safety	25	25	events			3	3	1.5	1.5	113	113	0.1	0.1	0.0	
	Plug Mains - Complaint Crew	219	219	events			3	3	2	2	1,313	1,313	0.9	0.9	0.0	
Sewer Cleaning	Plug Mains - Power Rod	219	219	events			3	2	1	1	657	438	0.4	0.3	-0.1	Assumes transition to 2-person rodding crew.
	Plug Mains - Flush	219	219	events			2	2	1	1	438	438	0.3	0.3	0.0	
	Hot spots - Power Rod	206	206	events			3	2	1	1	618	412	0.4	0.3	-0.1	Assumes transition to 2-person rodding crew.
	Hot spots - Flush	206	206	events			2	2	1	1	412	412	0.3	0.3	0.0	
	PM - <=18" - Power Rod	111	88	miles	1,000	1,100	3	2			14,066	6,782	9.1	4.4	-4.7	Assumes transition to 2-person rodding crew.
	PM - <=18" - Flush	78	132	miles	1,300	1,430	2	2			5,069	7,825	3.3	5.1	1.8	
	PM - <=18" - Hand Rod - Easement	8	45	miles	500	500	3	3			1,977	11,359	1.3	7.4	6.1	Assume 20 percent of mains in easements are on preventive maintenance program.
	Main Stoppage	73	73	events			2	2	1	1	146	146	0.1	0.1	0.0	
	System-wide Cleaning - <=18" - Power Rod		24	miles	1,000	1,100		2			0	1,809	0.0	1.2	1.2	Assumes 10-year cleaning cycle with 50% performed using power rodding
	System-wide Cleaning - <=18" - Flush		35	miles	1,300	1,430		2			0	2,087	0.0	1.4	1.4	Assumes 10-year cleaning cycle with 50% performed using hydro-flushing.
	System-wide Cleaning - <=18" in easements (Hand Rod)		18	miles	500	500		3			0	4,544	0.0	3.0	3.0	Remaining 80 percent of mains cleaned on 10-year cycle.
	System-wide Cleaning - >18" (Drag)		7	miles	500	500		4			0	2,450	0.0	1.6	1.6	
	CCTV Support Cleaning - Power Rod		14	miles	1,000	1,100		2			0	1,091	0.0	0.7	0.7	
	CCTV Support Cleaning - Flush		10	miles	1,300	1,430		2			0	580	0.0	0.4	0.4	
	Follow-Up Cleaning - PM - Power Rod after Flush		7	miles	1,000	1,100	3	2			0	509	0.0	0.3	0.3	
	Follow-Up Cleaning - PM - Flush after Power Rod		9	miles	1,300	1,430	2	2			0	522	0.0	0.3	0.3	
	Follow-Up Cleaning - System-wide - Power Rod after Flush		2	miles	1,000	1,100		2			0	136	0.0	0.1	0.1	
	Follow-Up Cleaning - System-wide - Flush after Power Rod		2	miles	1,300	1,430		2			0	138	0.0	0.1	0.1	
	SSO Response and Mitigation - Flush	100	100	events			2	2	4	4	800	800	0.5	0.5	0.0	
	SSO Response and Mitigation - Power Rod	100	100	events			3	2	3	3	900	600	0.6	0.4	-0.2	
Inspection	Troubleshooting/Stoppage and SSO Follow-up	300	300	events	250	250	3	2	2	2	1,800	1,200	1.2	0.8	-0.4	
	System-wide Main Inspection	13	98	miles	250	1,000	3	2			8,589	8,300	4.3	5.4	1.1	10-Year Systemwide CCTV program.
	System-wide MH Inspection	0	2200	events			2	2	0.25	0.25	0	1,100	0.0	0.7	0.7	
	MH Access Inspection - Easements	0	950	events			3	3	0.25	0.25	0	713	0.0	0.5	0.5	
	I/I Inspection	0	0	miles	250	250	3	2	3	3	0	0	0.0	0.0	0.0	
	Resurfacing Inspections	1	5	miles	250	1,000	3	2	4	4	507	422	0.3	0.3	-0.1	
Corrective Maintenance	Mainline Repairs	103	190	events			5	5	16	16	8,256	15,200	5.4	9.9	4.5	
	Locate and Raise Structures	103	260	events			3	3	6	6	1,858	4,680	1.2	3.0	1.8	
	Concrete/Finishing Work			events			4	2	4	8	0	0	0.0	0.0	0.0	Performed by Streets and Sidewalks Dept. Do they charge 3100?
Other Activities	Smoke Testing		0	miles	5,000	5,000	3	3			0	0	0.0	0.0	0.0	
	Easement Access - Brush Clearing		22	miles	1,000	1,000	3	3			0	2,840	0.0	1.8	1.8	1.2 day to clear brush for 500 to 600 feet of cleaning.
	Inspect Roof Control Contractor		50	miles	3,000	3,000	1	1	1	1	0	704	0.0	0.5	0.5	
	SSO Reporting	100	100	events			1	1	2	2	200	200	0.1	0.1	0.0	
	USA Marking	150	200	events			1	1	1	1	150	200	0.1	0.1	0.0	
Pump Stations	SCADA Review			events			1	1	1	1	0	0	0.0	0.0	0.0	
	Wet Well Cleaning	21	21	events			2	2	2	2	84	84	0.1	0.1	0.0	Assumes wet well cleaning every month.
	Operational Inspections	364	364	events			2	2	1	1	728	728	0.5	0.5	0.0	1 per week
	Alarm Response	7	84	events			2	2	1	1	14	168	0.0	0.1	0.1	Assume 1 for each station each month.
	Force Main R/W Inspection	0	0.25	miles	3,000	3,000	2	2			0	7	0.0	0.0	0.0	
	Force Main Maintenance															Assumes contract inspection and cleaning
	Preventive Maintenance						2	2	4	4						Performed by contractor.
	Major Maintenance						2	2	16	16						Performed by contractor.
	Unaccounted Work - (20%)												6.8	6.8	0.0	Assumed 20% of work is unaccounted currently. Assume unaccounted work remains constant for target.
Field Staff Subtotal											52,632	86,988	41.0	63.3	22.3	
Supervision	Superintendent	0	0	events			1	1	1540	1540	0	0	0.0	0.0	0.0	
Supervision	Supervisor II	1	1	events			1	1	1540	1540	1,540	1,540	1.0	1.0	0.0	
Supervision	Supervisor I	2	4	events			1	1	1540	1540	3,080	6,160	2.0	5.0	3.0	
Maintenance Planner			1	events			1	1	1540	1540	0	1,540	0.0	1.0	1.0	
Spatial Data Analyst			1	events			1	1	1540	1540	0	1,540	0.0	1.0	1.0	
Data Entry/Admin Support		1	1	events			1	1	1540	1540	1,540	1,540	1.0	1.0	0.0	
Admin and Supervision Subtotal													4.0	9.0	5.0	
Total													45.0	72.3	27.3	
Actual FTEs													42.0	69.0	26.0	
Overtime FTEs													3.0	4.3	1.3	
Overtime %													7.2%	6.4%		

Appendix B - Costs for Implementation of a Fats, Oils, and Grease Program

The City requested RMC to develop costs for the implementation of an effective Fats, Oils, and Grease (FOG) Control Program. Costs were developed using a workload estimate approach and assuming that all food service establishments would be permitted on a 5-year cycle and inspected annually using a "spot check" inspection approach. A "spot check" inspection approach assumes a 30 minute on-site inspection followed by another 30 minutes of documentation in the office. The outcome of the spot check inspection determines if additional inspections are necessary and in some cases will result in the issuance of requirements or violations.

The workload approach for the FOG Control program is based on inspections that are performed on food service establishments. Assumptions for the number of establishments, remodels, new establishments, and problem establishments are included below.

FOG Control Program Assumptions

Assumption	Quantity
Number of Food Service Establishments (FSEs)	2,000
Number of Annual Remodels	200 (10 percent of total)
Number of New FSEs Annually	200 (10 percent of total)
Number of Problem FSEs	300 (10 percent of total)
Number of Non-Cooperative FSEs	140 (7 percent of total)
Spot Check Inspection Frequency	Annual
Permit Renewal Frequency	5-Year Cycle
FOG Program Inspector Salary with OH (assume same salary rate as PW Supervisor I)	$187,000
FOG Program Supervisor Salary with OH (assume same salary rate as PW Supervisor II).	$214,000

Using the assumptions, a workload estimate was generated for FOG Control Program activities based on the City of San Diego FOG Control Program approach. The City of San Diego FOG Control Program approach was chosen due to its maturity and effectiveness are controlling grease-related sewer overflows. The activities performed by the FOG Control Program staff include food service establishment (FSE) permitting, FSE inspections, compliance-related follow-up activities, and grease investigations. A list and description of activities performed by FOG Control Program staff is included on the next page.

List and Description of FOG Control Program Activities

Activity	Description	Average Duration (Hours)
Initial Inspections	First inspection of an FSE. Populate in inspection database	2
Remodel Inspections	Remodeled FSEs are inspected to determine if new fixtures attached to grease removal equipment.	2
Permit Renewal Inspections	Inspection to determine if permit should be renewed. Opportunity to address outstanding deficiencies.	2
Spot Check Inspections – Annual	Annual quick inspection to determine if additional follow-up required.	1
Spot Check Inspections – Problem Facilities	Follow-up inspection of problem facilities to determine if on-going problem persists.	1
Permit Renewal	Documentation and transmittal of renewed permit.	1
New Permit	Documentation and transmittal of new permit.	1
Plan Review	Review of grease removal equipment design drawings.	1
Respond to Questions	Time to respond to questions from FSE owners and managers.	0.25
Compliance – Issue NOV	Document and issue a Notice of Violation.	2
Compliance – Follow-Up	Call and follow up on compliance activities.	4
Compliance – Hearings	Meet with FSE owners and managers to discuss NOV.	8
Compliance – Permit Revocation	Develop documentation to revoke a FOG discharge permit.	40
Grease Issue Investigation	Investigate grease issues found in the system, determine if FSE is cause, follow up with FSE inspection.	8

An estimation of workload required to accomplish these activities is included below.

Workload Estimate for FOG Control Program Implementation

Activity	Annual Number	Hours Per Activity	Annual Hours	Subtotal Hours	Percent of Time
Initial Inspections	200	2	400	3,020	46%
Remodel Inspections	200	2	400		
Permit Renewal Inspections	320		640		
Spot Check Inspections – Annual	1,280	2	1,280		
Spot Check Inspections – Problem Facilities	300	1	300		
Permit Renewal	520	1	520	720	11%
New Permit	200	1	200		
Plan Review	400	1	400	455	7%
Respond to Questions	220	.25	55		
Compliance – Issue NOV	140	2	280	2,000	30%
Compliance – Follow-Up	140	4	560		
Compliance – Hearings	140	8	1,120		
Compliance – Permit Revocation	1	40	40		
Grease Issue Investigation	52	8	416	416	6%
			TOTAL HOURS	**6,611**	

Based on the workload estimated above, approximately 4 FTEs will be required to implement a FOG Control Program using an approach similar to the City of San Diego with an additional FTE for supervision. The following table shows the total labor costs for inspection staff assuming an annual salary of $72,800 per inspector and $83,200 for a supervisor. This assumes that a FOG inspector's salary is roughly equivalent to a Public Works Supervisor I and a FOG supervisor's salary is roughly equivalent to a Public Works Supervisor II.

Summary FOG Program Annual Labor Costs

Cost Category	FOG Program Costs
Labor	$374,000 (5 FTEs)
Labor Overhead @ 157.3%	$588,000
Total Annual Labor Cost	**$962,000**

Each inspector will require a City vehicle to drive to inspection sites. The vehicle is assumed to be an economy size car with purchase price of $25,000. Annual costs for each vehicle, tools, and fuel are estimated in the following table.

FOG Program Equipment Costs – One Vehicle, One Inspector

Description	Assumption	Annual Cost
Car Purchase Price	$25,000	
Replacement Cycle (Years)	7	
Annual Equipment Cost		$3,571.43
Opportunity Cost	5%	$1,250.00
Equipment Maintenance (5% of purchase price)	5%	$1,250.00
Tools		$250.00
Fuel		$7,800.00
Misc Supplies		$200.00
TOTAL COST - Equipment, Fuel, Tools		**$14,500**

The total annual equipment, tool, and fuel costs for the FOG program are summarized below.

Summary of FOG Program Annual Equipment, Tool, and Fuel Costs

Cost Category	Equipment Cost, No Contingency
Number of Vehicles	**5**
Total Annual Equipment, Tool, and Fuel Cost	**$73,000**

Appendix C - Cost Estimate Assumptions

The cost estimates included an analysis of actual labor, fringe benefit, and overhead costs included in the City of Oakland budget. Actual costs for Fiscal Year 2009, Period 13 were analyzed to identify the proportion of costs added to expenditures for each labor dollar spent.

Analysis of Actual Fringe Benefits and Overhead Costs

Account	Description	FY2008 - Period 13	Percent of Regular Labor Cost
51111	Regular (Labor Cost)	$1,704,091	
51511	Paid Leave Charge	$359,249	21.1%
51611	Retirement Accrual	$550,157	32.3%
51613	Fringe Benefits	$749,944	44.0%
58521	Departmental OH Charge	$494,177	29.0%
58522	Central Services OH Charge	$526,003	30.9%
	TOTAL Fringe & OH		**157.3%**

Costs for paid leave, retirement accrual, fringe benefits, departmental overhead, and central services overhead were estimated along with salary costs to estimate loaded labor costs for crew members for different types of crews analyzed.

Equipment replacement costs were assumed based on recent experience in the City of Oakland or recent purchase prices experienced in San Francisco.

Assumptions for Equipment Replacement Costs

Activity	Equipment Type	Replacement Cost (2010$)	Comment
Cleaning	Power Rodder	$240,000	
Cleaning	Hydro Flusher	$400,000	Dual Axle
Cleaning	Hydro Flusher	$300,000	Single Axle
Inspection	CCTV Truck	$225,000	Fully Loaded
Construction	Pickup Truck	$50,000	
Cleaning	Drag Crew	$110,000	Drag Winches
Cleaning	Drag Crew	$80,000	Dump Truck
Cleaning	Drag Crew	$30,000	Pickup Truck

Appendix D contains detailed annual costs estimates for each of the different types of sewer maintenance crews at the City. A cost estimate was also include for a smoke testing crew in the case that the City wants to support smoke testing with internal sewer maintenance crews. The following table includes a summary of the labor and equipment costs one crew for each major maintenance activity. A detailed calculation of costs for each of the maintenance activities is included in Appendix C.

Summary of Annual Costs of Labor and Equipment for One Crew for Each Maintenance Activity

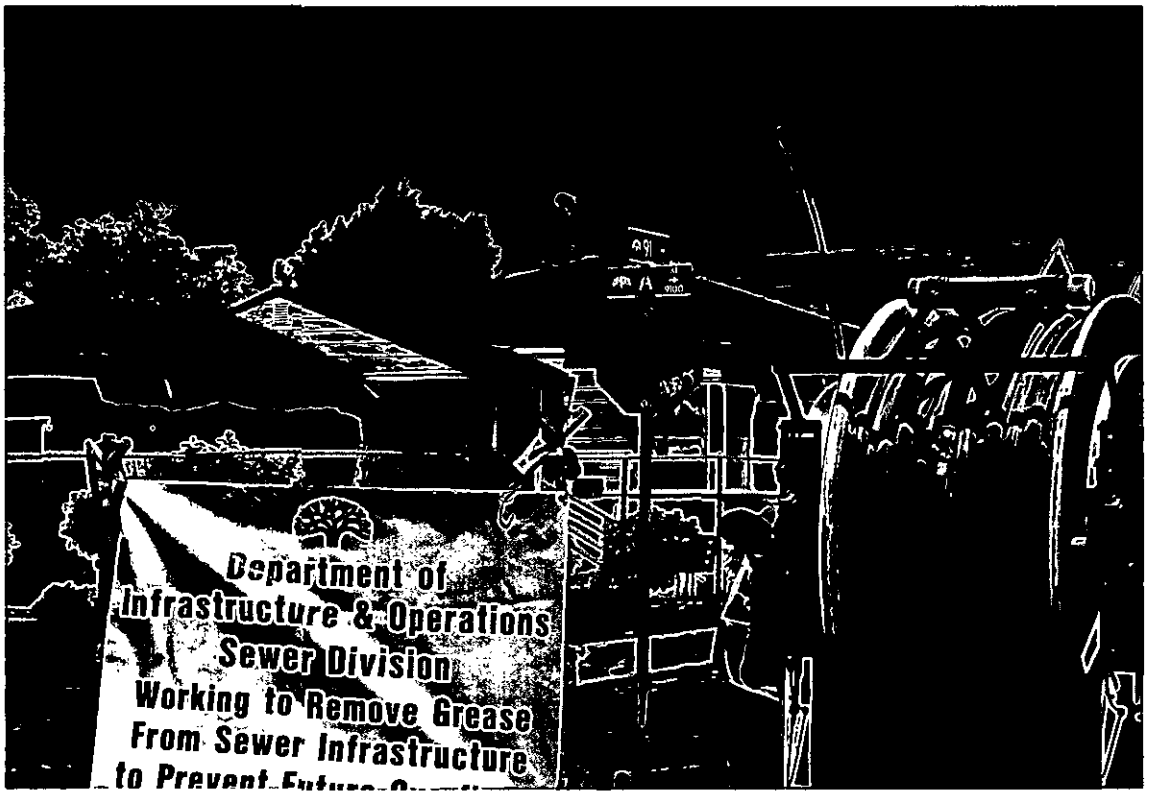
Crew Type	Annual Labor Cost	Annual Equipment, Tool, and Fuel Cost	Total Annual Crew Cost
Hydroflush (2-person)	$320,415	$93,800	$414,215
Power Rodding Crew (2-person	$320,415	$61,800	$382,215
Drag Crew (4-person)	$599,138	$72,932	$672,070
CCTV Inspection (2-person)	$320,415	$57,500	$377,915
CCTV Inspection (3-person)	$459,777	$57,500	$517,277
Manhole Inspection (2-person)	$320,415	$22,500	$342,915
Smoke Testing Crew (3-person)	$459,777	$23,800	$483,577

Based on the total annual costs for the different maintenance crews and the assumed productivity of each crew, unit costs were developed for City crews.

Unit Costs for Major Crew Activities

Crew Type	Total Annual Crew Cost	Productivity (feet/day)	Production Days Per Year	Annual Production (Feet)	Cost/Ft
Hydroflush (2-person)	$414,215	1300	192.5	250,250	$1.66
Power Rodding Crew (2-person	$382,215	1000	192.5	192,500	$1.99
Drag Crew (4-person)	$672,070	500	192.5	96,250	$6.98
CCTV Inspection (2-person)	$377,915	750	192.5	144,375	$2.62
CCTV Inspection (3-person)	$517,277	750	192.5	144,375	$3.58
Smoke Testing Crew (3-person)	$483,577	5000	192.5	962,500	$0.50

Attachment "F"



Photos of Oakland crews working to clear tree roots (top) and grease (bottom) form sewer pipes.

Attachment G

Sample photos of overflowing manholes (Courtesy City of San Diego)

DRAFT

Approved as to Form and Legality
DRAFT
Oakland City Attorney's Office

OAKLAND CITY COUNCIL

REVISED

Resolution No. _____ C.M.S.

Introduced by Councilmember _____

A RESOLUTION OF INTENTION TO AMEND CHAPTER 13 OF THE OAKLAND MUNICIPAL CODE INCREASING THE SEWER SERVICE CHARGE, INITIATING A MAJORITY PROTEST PROCEEDING UNDER ARTICLE XIII-D OF THE CALIFORNIA CONSTITUTION, AND SETTING THE DATE FOR A PUBLIC HEARING TO CONSIDER THE SEWER SERVICE CHARGE INCREASE

WHEREAS, the City was ordered by the United States Environmental Protection Agency and the Bay Area Regional Water Quality Control Board in 2009 to reduce overflows and wet-weather flows from public sanitary sewers; and

WHEREAS, the new requirements require the City to significantly increase its maintenance and infiltration/inflow (I/I) correction programs; and

WHEREAS, the Council of the City of Oakland on June 23, 1987, previously approved in Ordinance No. 10876 C.M.S. a Negative Declaration for the sanitary sewer infiltration/inflow (I/I) correction program; and

WHEREAS, the sewer service charge rates fund the City's sanitary sewer maintenance and capital improvement programs; and

WHEREAS, the City Council of the City of Oakland finds and determines that the current sewer service charge rates are not adequate to fund the needed maintenance and I/I correction programs mandated under the new requirements; and

WHEREAS, the City Council of the City of Oakland finds it necessary and prudent to increase the sewer service charge rates to adequately fund the capital improvements and maintenance and operations required under the new requirements; and

WHEREAS, Article XIII-D of the California Constitution requires that (1) revenues derived from the sewer service charge shall not exceed the funds required to provide the property related service; (2) revenues derived from the sewer service charge shall not be used for any purpose other than that for which the charge was imposed, and (3) that the amount of the sewer service charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel; and

WHEREAS, the proposed sewer service charge increase is based on the cost of providing the capital improvements required and for the maintenance and operation of the sanitary sewer system; and

WHEREAS, the State of California constitution, Article XIII-D, requires that all new property related charges for water, sewer or refuse service are subject to a majority protest proceeding; and

WHEREAS, Article XIII-D provides that charges may be increased within limits previously approved, since increases in the costs of providing these services are likely, a rate increase structure should be included, and provide a maximum rate of increase; and

WHEREAS, in order to comply with Article XIII-D of the California Constitution, the City must provide written notice to the record owner of each parcel subject to the proposed sewer service charge increase (a) the amount of the sewer service charge proposed to be imposed upon each, (b) the basis upon which the amount of the proposed sewer service charge was calculated, (c) the reason for the sewer service charge increase, and (d) the date, time and location of a public hearing on the proposed sewer service charge increase; and

WHEREAS, following a public hearing and if there is no majority protest, the City Council may, by ordinance, adopt the proposed amendments to Chapter 13 of the Oakland Municipal Code; now, therefore, be it

RESOLVED: That the City Council of the City of Oakland does hereby submit to the property owners of the City of Oakland, in compliance with the majority protest proceeding requirements of Article XIII-D of the California Constitution, the text of the proposed amendments, which shall be as follows:

13.04.020 Imposition of sewer service charge.

Every party in whose name sewage disposal service of the East Bay Municipal Utility District (District) is granted shall pay a sewer service charge according to the rates as follows, beginning with the first billing period following January 1, 2011:

A. A monthly charge of twenty-five dollars and eighty cents ($25.80) is established and assessed for the use of sewer facilities for every single-family residence as defined by the District's Business Classification Code 8800, Private Residence.

B. For multiple-family dwellings, as defined by the District's Business Classification Code 6513, Multiple Dwelling, the following monthly charges are established and assessed for the use of sewer facilities:

1. Duplexes: twenty-eight dollars and ninety-five cents ($28.95) per month;
2. Triplexes: forty-three dollars and forty-three cents ($43.43) per month;
3. Fourplexes: fifty-seven dollars and ninety-two cents ($57.92) per month.

C. For residential premises not included in subsection A or B of this section, a charge based upon the cubic feet of water used on the premises will be made for the use of sewer facilities, which charge shall be computed and levied as follows:

1. One dollar and seventy-six cents ($1.76) per one hundred (100) cubic feet per month.

In no case shall the total monthly charge be less than twenty-five dollars and eighty cents ($25.80).

D. For premises in the district's "commercial," "industrial," and "public authority" business certifications, a charge based on cubic feet of water used upon the premises will be made for the use of sewer facilities, which charge shall be computed and levied as specified below:

1. Industrial accounts: one dollar and sixty cents ($1.60) per one hundred (100) cubic feet per month;
2. Commercial accounts: one dollar and seventy-six cents ($1.76) per one hundred cubic feet per month;
3. Restaurants/hotels: one dollar and eighty-two cents ($1.82) per one hundred cubic feet per month;
4. Hospitals: one dollar and ninety-six cents ($1.96) per one hundred (100) cubic feet per month;
5. Laundromats/car washes: two dollars and six cents ($2.06) per one hundred (100) cubic feet per month.

In no case shall the total monthly charge be less than twenty-five dollars and eighty cents ($25.80).

E. For premises with a sewage meter for measuring actual sewage flow from such premises, a charge based on cubic feet of measured sewage flow from the premises, and applicable to all buildings for water consumption cycles commencing on and after January 1, 2011, will be made for the use of sewer facilities, which charge shall be computed and levied as follows:

1. Two dollars and thirteen cents ($2.13) per one hundred cubic feet of sewage flow per month.

In no case shall the total monthly charge be less than twenty-five dollars and eighty cents ($25.80).

F. The sewer service charges established and assessed in subsections C and D of this section shall be applicable to premises where no meter is installed or available in said premises for measuring the volume of sewage from such premises into sewers. The sewer service charge for these premises shall be based upon the total amount of water used from all sources, as ascertained by the district, for sewage disposal service charges imposed by such district within the City.

G. The sewer service charge established and assessed in subsection E of this section shall be applicable to premises where a portion of the water received from any source does not flow into sewers because of manufacturing or removal by other means and a meter is installed or available in said premises for measuring the volume of sewage from such premises into sewers. The sewer service charge for these premises shall be based upon the volume of sewage discharging from such premises into the sewers, as ascertained by the district for sewage disposal service charges imposed by the district within the City.

H. The charges established and assessed in subsections A through E of this section shall become due and payable on receipt of bill therefore. Such charges shall be paid directly to the City or to the district, as directed upon the bill. (Ord. 11801 § 1 *Exhibit A*, 1995: prior code § 6-7.02)

I. Beginning with annual billing period that begins on or after January 1, 2012, the sewer service charge rates established above shall be increased by sixteen percent (16%) annually through the annual billing period that begins on or after January 1, 2014.

J. For the annual billing period that begins on or after January 1, 2015, the sewer service charge rates shall be increased at an annual rate equal to but not to exceed the prior years percentage change in the Consumer Price Index for the San Francisco Bay Area, compiled by the United States Department of Labor, Bureau of Labor Statistics, or successor thereto, between such Index as of June in the year prior to the year in which rates are being increased and June twelve (12) months earlier, as provided for the use of sewer facilities owned and operated by the City.

Exhibit A details the rate charged for each of the East Bay Municipal Utilities District 88 Business Classification Codes (BCC); and be it

FURTHER RESOLVED: That the City Administrator or his designee is hereby directed to obtain printing, supplies and services as required; and be it

FURTHER RESOLVED: That the City Administrator or his designee is hereby authorized to provide such other services and supplies in connection with said majority protest proceeding as may be required by the Statues of the State of California and the Charter of the City of Oakland; and be it

FURTHER RESOLVED: That the City Administrator or his designee is directed to conduct a mailing of the Notice of Public Hearing to all affected property owners, in compliance with Article XIII-D of the California Constitution; and be it

FURTHER RESOLVED: That a public hearing is set for July 6, 2010, to hear all public comments as to the proposed amendments to Chapter 13 of the Oakland Municipal Code.

IN COUNCIL, OAKLAND, CALIFORNIA, _____

PASSED BY THE FOLLOWING VOTE:

AYES - BROOKS, DE LA FUENTE, KAPLAN, KERNIGHAN, NADEL, QUAN, REID, AND PRESIDENT BRUNNER

NOES –

ABSENT –

ABSTENTION –

ATTEST:

_____
LATONDA SIMMONS
City Clerk and Clerk of the Council of
the City of Oakland, California

Exhibit "A"

CITY OF OAKLAND
SEWER SERVICE CHARGES AND RATES
EFFECTIVE JANUARY 01, 2011

BCC	Description	Metered Rate Per ccf	BCC	Description	Metered Rate Per ccf
0100	Agriculture	1.60	3900	Miscellaneous Mfg.	1.60
0700	Veterniarian Services	1.76	4000	Railroad Transt	1.60
1200	Mining and Wuarrying	1.60	4100	Local/Suburb Transt	1.60
1500	Construction	1.60	4200	Warehousing	1.60
2010	Meat Prod-Proc/Pkg	1.60	4400	Water Transportation	1.60
2011	Slaughterhouse	1.60	4500	Air Transportaion	1.60
2020	Dairy Prod Processing	1.60	4700	Tranportation Sevcs	1.60
2030	Fruit/Vegetable Canning	1.60	4800	Elect Communications	1.60
2040	Grain Mills	1.60	4900	Elec., Steam, Nat Gas	1.60
2050	Bakeries	1.60	4950	Sanitary Coll/Disposal	1.60
2051	Bakeries-Bread Only	1.60	5000	Wholesale Trade	1.76
2060	Sugar Processing	1.60	5300	Retail Trade	1.76
2070	Fats and Oils	1.60	5400	Food Sales	1.76
2077	Rendering Tallow	1.60	5540	Gas/Oil Dealers	1.76
2080	Beverage Mfg.	1.60	5811	Restaurant-Fast Food	1.82
2090	Specialty Food Mfg.	1.60	5812	Restaurant	1.82
2091	Seafood Processing	1.60	5813	Drinking Bar/Club	1.82
2300	Textile Goods Mfg.	1.60	6500	Cemeteries	1.76
2400	Lumber & Wood Mfg.	1.60	6513	Apt Bldg - 5 or More	1.76
2500	Furniture	1.60	6800	Ofices	1.76
2600	Pulp & Paper Prod Mfg.	1.60	7000	Hotels with Food	1.82
2700	Printing Publishing	1.60	7001	Hotels without Food	1.82
2810	Inorganic Chem Mfg.	1.60	7020	Boarding Houses	1.82
2820	Synthetic Material Mfg.	1.60	7200	Personal Services	1.76
2830	Drugs Mfg.	1.60	7210	Commercial Laundries	2.06
2840	Clean & Sanitary Prod Mfg.	1.60	7215	Coin Laundromats	2.06
2850	Paint Mfg.	1.60	7216	Clean & Dye Fabrics	2.06
2860	Organic Chemicals Mfg.	1.60	7218	Industiral Laundries	2.06
2870	Agriculture & Chem Mfg.	1.60	7260	Crematory, Funeral Home	1.76
2891	Adhesive & Gelatin Mfg.	1.60	7300	Laboratories	1.76
2893	Ink & Pigment Mfg.	1.60	7342	Fumigating	1.76
2900	Petroleum Prod Mfg.	1.60	7500	Automobile Repair Sves	1.76
3000	Rubber Products	1.60	7539	Battery Services	1.76
3110	Leather Tanning	1.60	7542	Auto Laundries	2.06
3200	Earthenware Mfg.	1.60	7600	Misc Repair Services	1.76
3300	Primary Metals Mfg.	1.60	7699	Septic Tank Cleaning	1.76
3400	Metal Prod Fabrication	1.60	7900	Amusement Services	1.76
3410	Drums & Barrels Mfg.	1.60	7940	Equestrian Activities	1.76
3470	Metal Finishing	1.60	7950	Irrigation Use Only	Exempt
3500	Machinery Mfg.	1.60	7990	Parks and Gardens	1.76
3590	Machine Shop Repair	1.60	8000	Health Services	1.76
3600	Electric Machine Mfg.	1.60	8060	Hospitals	1.96
3700	Trans Equip Mfg.	1.60	8200	Schools	1.76
3730	Shipbuilding	1.60	8600	Non-Profit Services	1.76
3800	Precision Equip Mfg.	1.60			