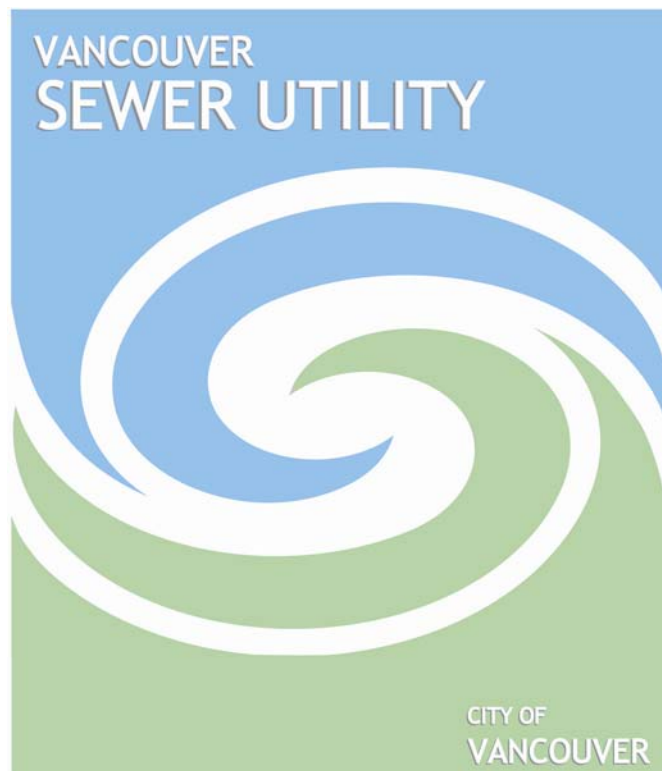


City of Vancouver Sewer Utility Annual Report 2007



Introduction:	3
Goal 1: Sustainable Sewer Utility	5
CSO Elimination.....	6
Main Sewer Separation Rates.....	6
Sewer Separation on Private Property.....	7
Water Quality.....	9
Still Creek.....	12
Source Control.....	12
Greenhouse Gas Reduction.....	14
Financial Status.....	15
Goal 2: Service Delivery	16
Proactive Infrastructure Management:.....	16
Capital Construction Program:.....	16
Program Drivers:.....	17
Main Installation Costs.....	17
Service standards.....	20
Anticipating and Responding to Customer's Needs.....	22
Customer satisfaction.....	23
Goal 3: Industry Leadership	24
Direction.....	25
Collaboration.....	25
Recognition.....	25
Workforce Management.....	26
Innovation.....	26
Employee Recognition.....	27
Goal 4: Working Environment:	28
Communication.....	28
Employee Relations.....	28
Information, Tools, and Equipment.....	29
Corporate Memory.....	29

Introduction:

2007 was a challenging year for the City of Vancouver and the people who depend on the services that city staff provide. In mid-July contract negotiations with unionized staff broke down and a 13 week strike ensued. The strike took place at the height of the construction season starting in mid July and ending in mid-October, hence the numbers that indicate productivity are not comparable to those of previous years.

The exception to this are the numbers presented in relation to the maintenance program. The maintenance data presented in this report has been modified to capture only the first six months of the year. While this makes comparisons with previous years possible, it does not reflect the efficiency levels typically achieved during the fall months. In 2007 the operational work program was modified considerably during the labour dispute and once forces returned to work sewer personnel were deployed to other civic priorities. Additionally the efficiencies typically achieved by the cyclical nature of maintenance work are not reflected in the data.

After a brief outline of the Utility, this annual report is structured according to the Vancouver Sewer Utility's 4 goals:

- Sustainable Sewer Utility
- Service Delivery
- Industry Leadership
- Working Environment

This format is designed to highlight the challenges and successes that the Utility met as staff pursued these strategic directions throughout 2007. Each goal clearly states the direction for the Utility and is supported by objectives. This document reports the tangible measurable results achieved in the pursuit of each goal.

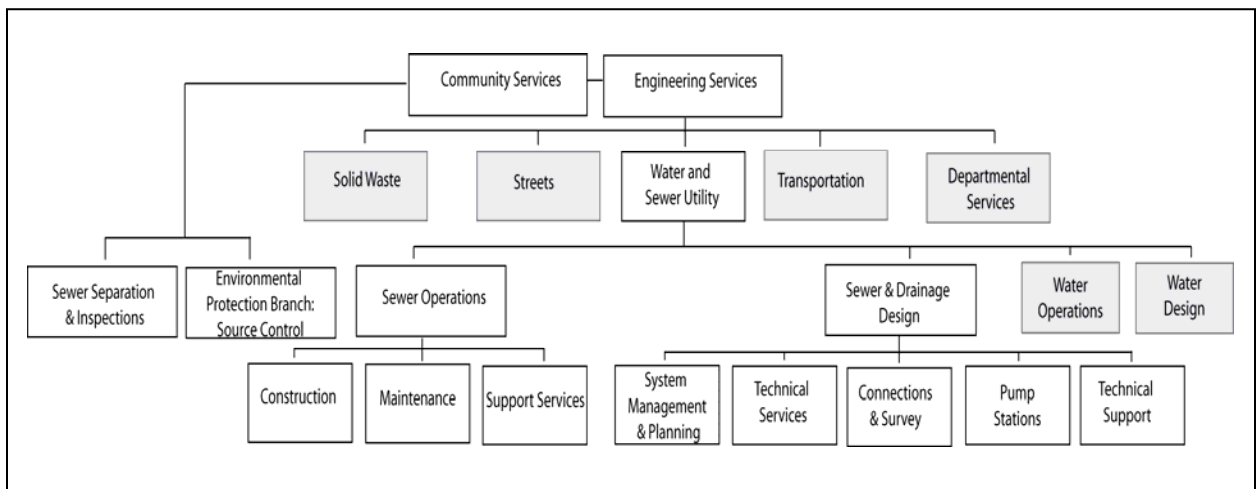


Vancouver Sewer Utility

The Sewer Utility is comprised of two distinct yet equally important groups: the Design Engineers and their staff who plan, design, and manage the infrastructure, and the Operations personnel who build and maintain the sewer system. Overall, the Utility employs more than 200 staff to design, build, maintain, and rehabilitate a network of more than 2000 km of sewer mains, 26 pumping stations, 45,000 catch basins, and 100,000 sewer connections. The Utility is supported by two branches of the Community Services Group who perform inspections and enforcement services; Sewer Separation and Inspections, and the Environmental Protection Branch.



The City of Vancouver operates the Sewer Utility under authority of Section 302 of the Vancouver Charter, a statute of the Province of British Columbia. The Sewer and Watercourse Bylaw #8093 establishes the relationship between the City and its sewer customers, and assigns related authority to the City Engineer, and the Director of Finance. Federal and Provincial laws govern some aspects of the operation of the sewer system while the regional Liquid Waste Management Plan (LWMP) establishes the framework of policy commitments by which the City of Vancouver agrees to operate the sewer system.



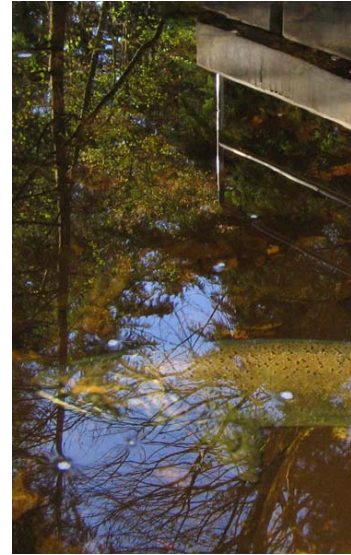
Goal 1

Sustainable Sewer Utility: We undertake sustainable development and stewardship of the sewer utility.

We take the long-term view in the provision of sewer and drainage infrastructure and services, developing solutions that recognize community, social, economic, and environmental considerations.

Objectives:

- Decisions are based on long term economic, social, and environmental considerations
 - Economic:
 - We take the long term view using life cycle analysis to minimize the true costs and optimize the benefits of our work.
 - The value of energy and materials within the sewer and drainage system is captured.
 - Social:
 - We protect public and worker safety
 - We minimize the negative impact of construction, operation, and maintenance on the community by consulting with the community
 - Community development: opportunities to enhance the city's economic, recreational, cultural, and aesthetic assets are optimized.
 - Environmental:
 - Wherever possible, we restore and protect the natural environment.
 - Resource optimization and conservation is primary



CSO Elimination

Main Replacement/Separation

Vancouver's Sewer Utility is committed by the Liquid Waste Management Plan (LWMP) to eliminate Combined Sewer Overflows (CSOs) by 2050. A steady municipally funded base replacement/separation rate supplemented by additional work funded by the Federal and Provincial Governments each year was committed to in the 1980s to meet the target at a rate of 1 per cent annually.

This program was designed to keep pace with the sewer network life cycle. The commitment to steady funding resulted in the capacity to retain a skilled work force and to avoid over burdening one generation with costly infrastructure renewal mega-projects.

Funding from the Federal and Provincial governments has not been as steady or fruitful as planners hoped, construction inflation has outpaced consumer inflation by up to 6 per cent in recent years, and unstable labour relations have interrupted program schedules significantly. These factors have contributed to a significant shortfall in the number of kilometres replaced/separated thus far. A gradual increase in the rate of replacement/separation to meet the target specified by the LWMP is planned.

The table below summarizes the details:

Main Sewer Separation Rates		
Estimated length of separate system	1470 km	
Target Separation by 2050	1397 km	95% of total length is expected to eliminate CSOs
Separation completed to end of 2007	586 km	40 %
Years remaining to 2050	43 years	
Average annual separation rate to achieve target	19 km	1.28%
Actual average annual separation rate	12 km	0.82%

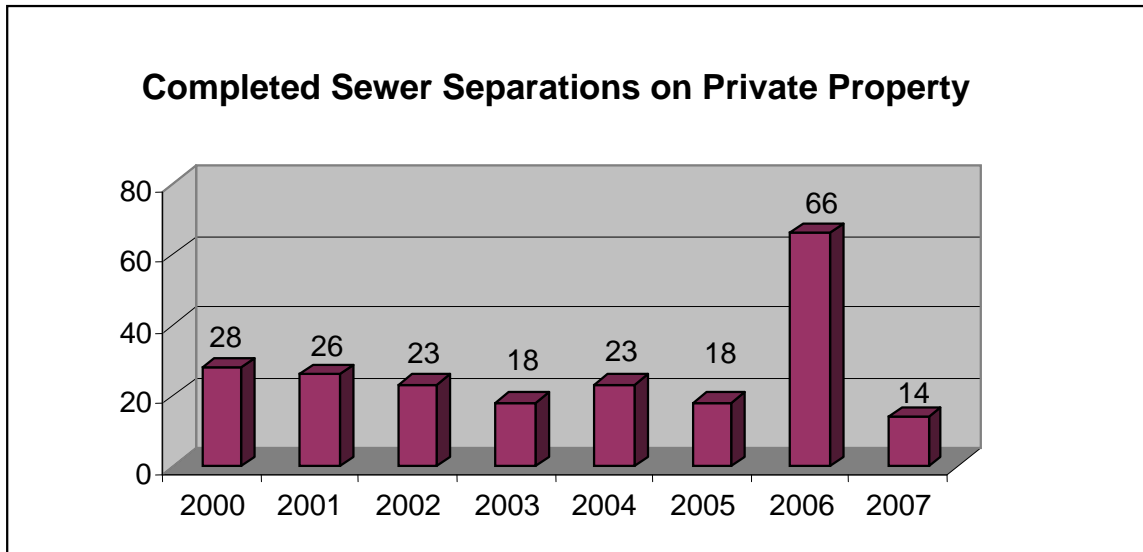


The difference between the rate required to achieve the target and the actual separation rate will be made up for over the remaining 43 years. A financial plan to achieve this goal will be developed in 2008 and submitted during the 2009-2011 capital planning process.



Sewer Separation on Private Property

The separation of combined sewers on private property is essential to the goal of eliminating CSOs by 2050. The sewer separation on private property program systematically targets buildings in neighbourhoods in which separation will have the biggest impact on reducing CSOs. Staff investigate buildings for combined and/or cross connections, and encourage property owners to separate their systems.



Sewer Separation on Private Property				
	2000	2001	2002	2003
Target neighbourhood	Downtown	Downtown	Downtown	Downtown SE False Creek
Completed Separations	28	26	23	18
Rain water removed from Sanitary flow (sq ft of property)	312,000	33,000	90,713	195,000
Sanitary fixtures removed from rain water system	3900	1020	3719	7419

Sewer Separation on Private Property				
	2004	2005	2006	2007
Target neighbourhood	Downtown SE False Creek	Downtown SE False Creek	Downtown SE False Creek	Downtown SE False Creek
Completed Separations	23	18	66	14
Rain water removed from Sanitary flow (sq ft of property)	13,446	12,000	60,000	7,900
Sanitary fixtures removed from rain water system	3830	1800	6944	2784

To ensure separate service connections are installed correctly at time of construction or renewal, staff perform inspections of the service connections



The objective is to eliminate all CSOs by 2050 as mandated by the LWMP.

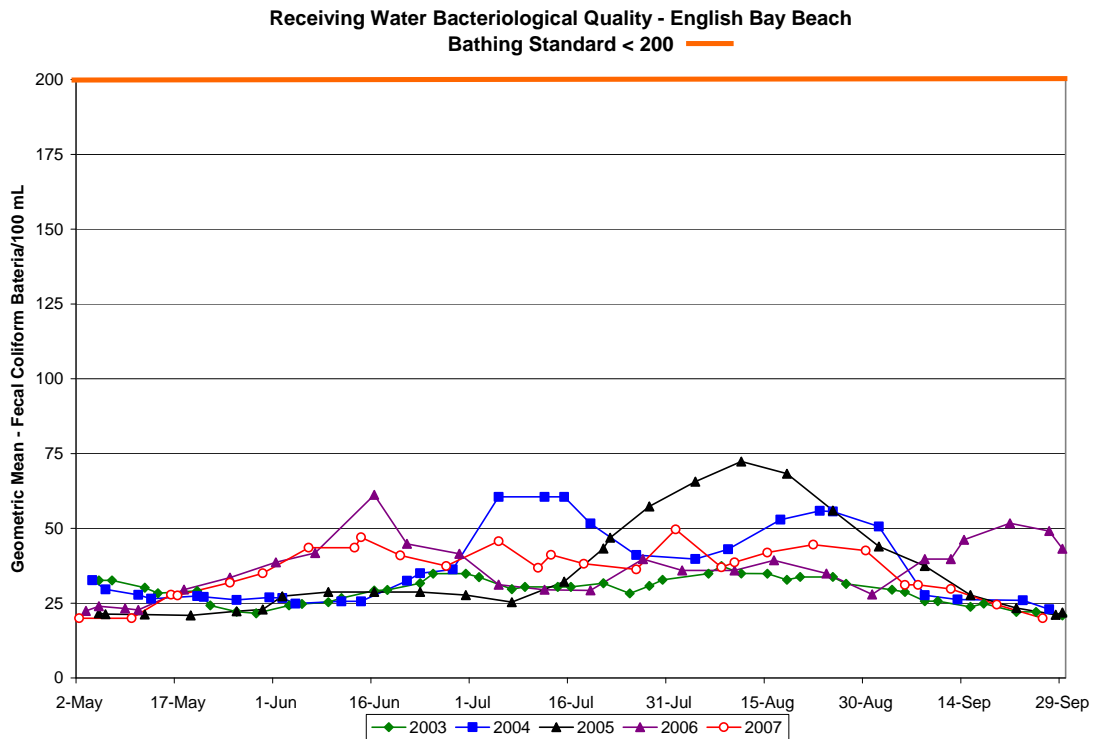
Vancouver Sewer Utility Combined Sewage Outfalls			
QB 53 Identifier	Combined Sewage Outfall Name	Date Eliminated	Elimination Expected
2	Slocan St		
3	Victoria Dr		
6	Heatley Ave		
7	Columbia St		
9	Burrard St		2010

11	Denman St	2006	
13	Jervis St		
14	Granville St	1999	
22	Crowe St Yard (East)		2010
25	Laurel St		2012
26	Granville Island (Hemlock St)		2014
30	Arbutus St		
38	Dunbar St		
46	Shaughnessy St		
92	Terminal Ave		2018
101	Drake St	1995	

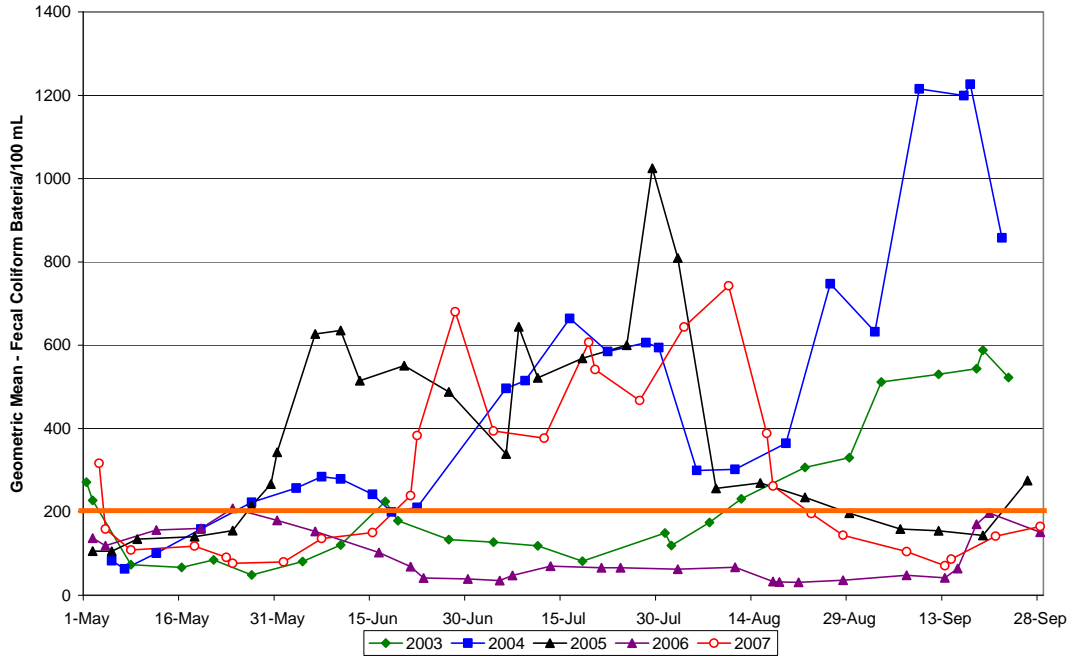
Water Quality

The quality of the receiving waters is an important indicator of how much the sewer system is contributing to water pollution control. There are many factors that affect water quality including: marine vessels, wildlife, pets, combined sewer overflows, and sanitary sewer spills. Water quality is monitored to ensure that the receiving waters are fit for primary contact especially in areas popular for recreational activities.

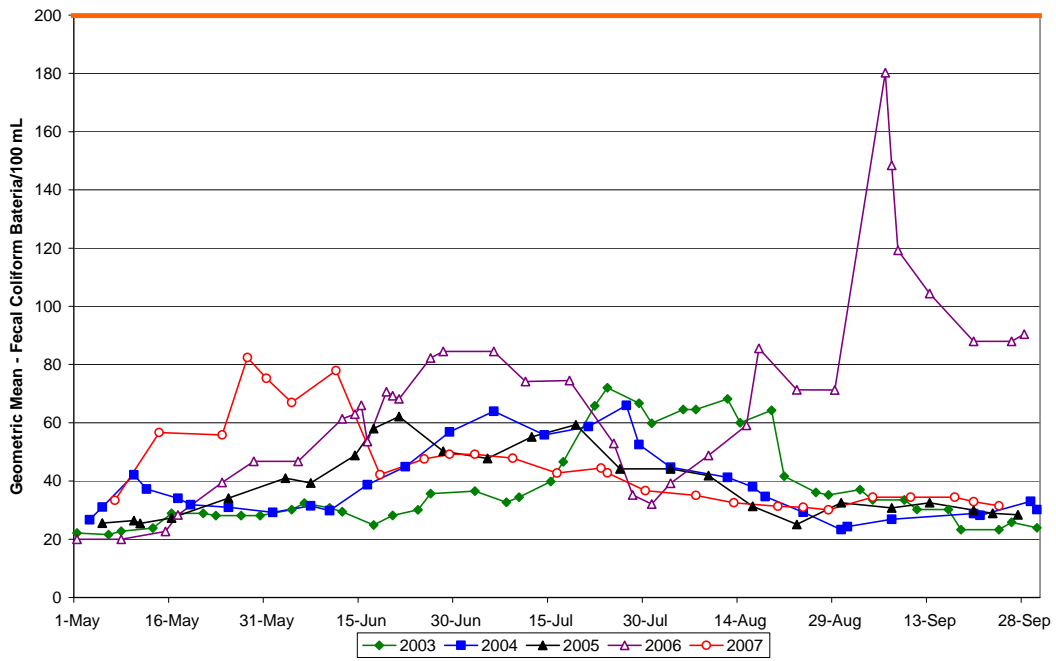
Metro Vancouver samples the receiving waters and measures the fecal coliform levels, reporting the results to the Sewer and Drainage Design Branch for monitoring purposes. The following charts show the fecal coliform levels in selected receiving waters around Vancouver over the last five years.



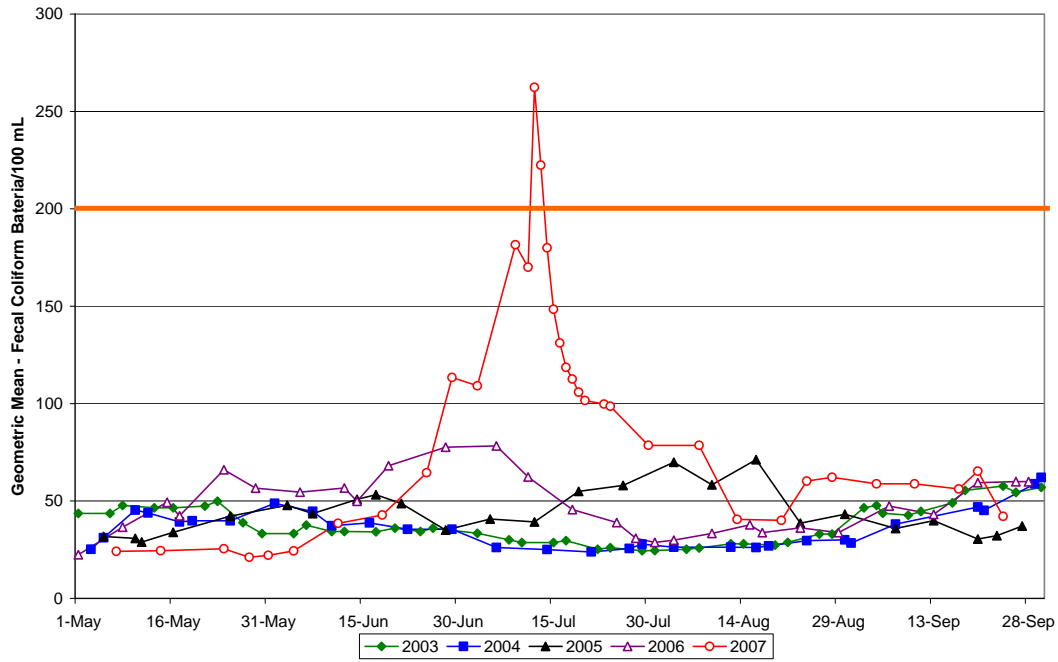
Receiving Water Bacteriological Quality - False Creek East
 Bathing Standard > 200



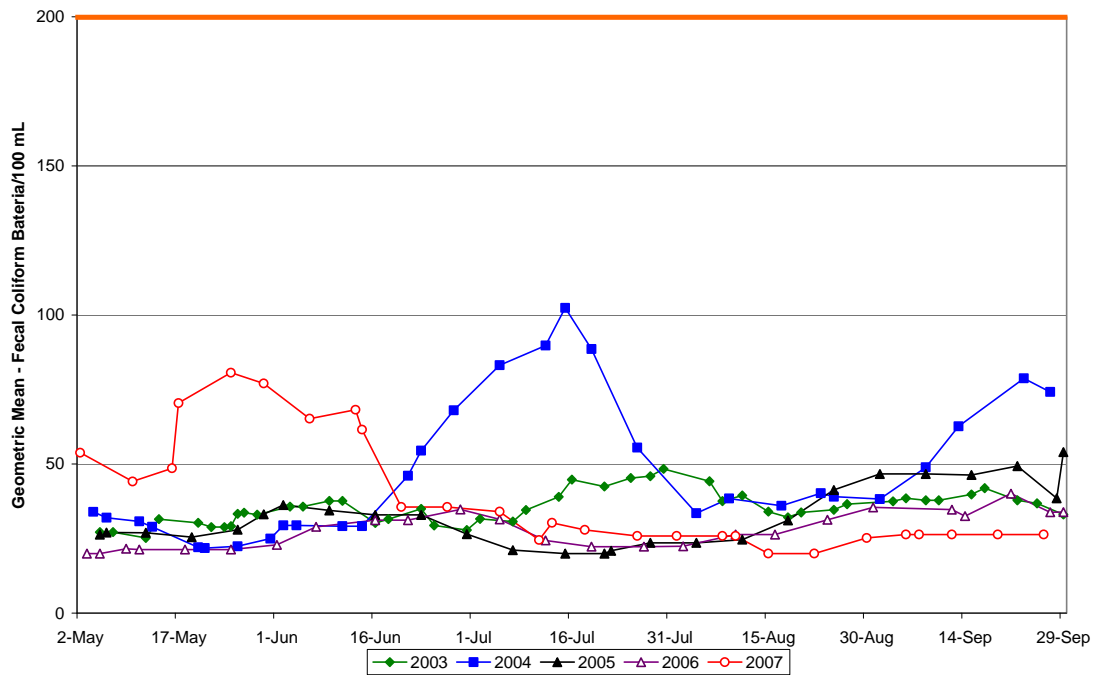
Receiving Water Bacteriological Quality - Kitsilano Beach
 Bathing Standard > 200



Receiving Water Bacteriological Quality - Locarno
 Bathing Standard > 200



Receiving Water Bacteriological Quality - Third Beach
 Bathing Standard > 200



Still Creek

The Still Creek Enhancement Plan was adopted by Vancouver City Council in July 2002. The long-term objectives of the Plan are to improve creek ecology, enhance recreation opportunities along the creek, improve rain water management and increase public awareness of Still Creek as an important environmental and recreational resource.

In 2007, the enhancement of Still Creek along the 3400 block of Cornett Road was completed. This project includes the rehabilitation of the riparian area of Still Creek through replacing invasive species with native shrubs and trees, improving the stream bed, and creating a pedestrian path along the south side of the creek.

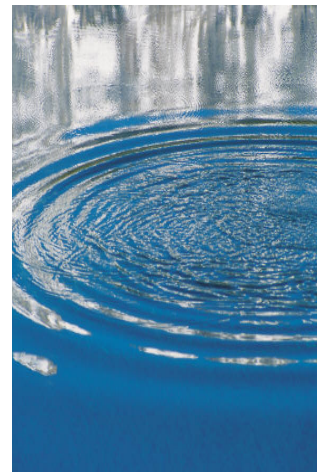
Source Control

The Environmental Protection Branch performs regular inspections and monitors the treatment and discharge to sewers of industrial and commercial wastes; searches out the sources of and eliminates the discharge of volatile or other hazardous substances entering public or private sewers; advises plant management, consultants, contractors on required treatment systems for liquid waste industries. This branch also issues Waste Discharge permits on behalf of the Greater Vancouver Regional District.

In 2007 there were 55 permitted companies holding 57 Waste Discharge Permits and more than 20 Groundwater Treatment Permits all of which contribute up to 20 per cent of the Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) loading at the Iona Wastewater Treatment Plant.

One of the few municipalities in the lower mainland to issue Waste Discharge permits, the City of Vancouver's Environmental Protection Branch builds a working relationship with permittees and achieves a high rate of compliance.

The vast majority of service is provided in response to complaints, and applications for the following:



Development Permits

In relation to contaminated sites issues which may result in a Waste Discharge Permit for the pumping of contaminated ground water from a site, treating it to remove contaminants and discharging it to sanitary sewer

1. Building Permits

In relation to waste water discharges to sanitary and storm sewers

- a. Erosion and Sediment Control Plans (for large construction sites to control excavation water, sediment dragged onto streets by truck wheels, rain water collection and treatment) Plans are submitted, approved, implemented and enforced throughout the construction period.
- b. To ensure waste water treatment will be provided for the intended occupants of the building - grease traps at restaurants, oil water separators at auto repair facilities, sediment traps and oil water separators at car wash facilities, amalgam separators at dental offices, etc

2. Occupancy Permits

To ensure that the owners/ operators of a facility know how to use and maintain the installed treatment works such as the grease traps or oil water separators.

Complaints are generally received directly from the public, and applications for the above listed licenses or permits automatically trigger communication directly with the Environmental Protection Branch. In this way the City of Vancouver is able to provide the applicant with one-stop shopping as opposed to those in other municipalities who must apply to the city in which they are doing business and to Metro Vancouver for the Waste Discharge permit.

In 2007, the Environmental Protection Branch wrote 13 orders to comply with the bylaw.



Greenhouse Gas Reduction

In recent years the Utility has implemented a number of measures that contribute to greenhouse gas reductions related to emissions from vehicles. In past years driver training programs have resulted in fuel savings and re-using native soils for backfill has reduced the amount of trucking required to and from construction sites.

In 2007, native soils reuse resulted in a substantial reduction in greenhouse gases over those achieved in 2006 (see table below).



Greenhouse Gas Reduction			
	2005 (mid)	2006 (mid)	2007 (mid)
Total hired trucking hours	16,610 hrs	16,523 hrs	12,211 hrs
Approx CO2 produced	473,405 kg	470,925 kg	348,028 kg
Approx. CO2 decrease from previous year	n/a	2,480 kg	122,897 kg

Planned improvements to the Vernon Silt Recovery Site will advance dehydration of material thereby reducing trucking and resultant greenhouse gases.



Financial Status

				Variance
		2007 Budget	2007 (Revenues) Expenditures	Favourable (Unfavourable)
Expenditures				
	City Operating and Maintenance Expenditures	\$ 6,250,904	\$ 5,411,927	\$ 838,977
	Sewer Debt Charges	\$ 24,826,300	\$ 24,826,070	\$ 230
	GVS&DD Levy	\$ 39,155,817	\$ 39,149,536	\$ 6,281
	Total Sewer Costs	\$ 70,233,021	\$ 69,387,533	\$ 845,488
Funding Sources				
	Total Sewer Costs to be Funded	\$ 70,233,021	\$ 69,387,533	\$ 845,488
	BOD/TSS/Flow Revenues	\$ (1,274,000)	\$ (1,187,628)	\$ (86,372)
	Net Sewer Costs to be Funded	\$ 68,959,021	\$ 68,199,905	\$ 759,116
	Funded by Sewer User Fees	\$ (33,218,346)	\$ (32,828,482)	\$ (389,864)
	Funded by General Property Taxes	\$ (35,740,675)	\$ (35,371,423)	\$ (369,252)
Sewer User Fees				
	Sewer Fees - Flat Rate	\$ (14,283,000)	\$ (14,383,017)	\$ 100,017
	Sewer Fees - Metered	\$ (19,274,300)	\$ (19,007,245)	\$ (267,055)
	Industrial Waste Water Fees	\$ (159,600)	\$ (152,378)	\$ (7,222)
		\$ (33,716,900)	\$ (33,542,640)	\$ (174,260)
	less Sewer Billing and Administration	\$ 443,900	\$ 376,994	\$ 66,906
	Net Funding from Sewer User Fees	\$ (33,273,000)	\$ (33,165,646)	\$ (107,354)
	Transfer to the Sewer Rate Stabilization Reserve	\$ 54,654	\$ 337,164	\$ (282,510)
	Funded by Sewer User Fees	\$ (33,218,346)	\$ (32,828,482)	\$ (389,864)
Sewer Rate Stabilization Reserve				
	Opening Balance, January 1, 2007	\$ (5,246,746)	\$ (5,246,746)	\$ -
	Transfer (to) Reserve	\$ (54,654)	\$ (337,164)	\$ (282,510)
	Transfer (to) Reserve (Debt Charges)		\$ (1,714,955)	\$ (1,714,955)
	Ending Balance, December 31, 2007	\$ (5,301,400)	\$ (7,298,865)	\$ (1,997,465)

Goal 2

Service Delivery: We provide excellent, equitable, and innovative service delivery. We are the service provider of choice.

We anticipate and are responsive to our stakeholders' and customers' needs. We have documented our service standards and they are understood by our stakeholders, customers, and employees. We meet or exceed our service standards and are the service provider of choice.

Objectives:

- We manage infrastructure proactively.
- We anticipate stakeholder/customer needs and are responsive to their requests.
- Our service standards optimize value for stakeholders/customers.
- Stakeholders, customers and employees understand our service standards.

- We meet or exceed service standards and expectations to the satisfaction of stakeholders/customers.
- Customers are served fairly and consistently.

Proactive Infrastructure Management:

This is the cornerstone of the Utility's activities throughout any given year. Infrastructure management includes evaluating the condition and performance of the existing network of mains and connections, designing new mains and connections, optimizing the existing system, separating the sewer mains and connections, and building and maintaining the network of pipes.

Capital Construction Program:

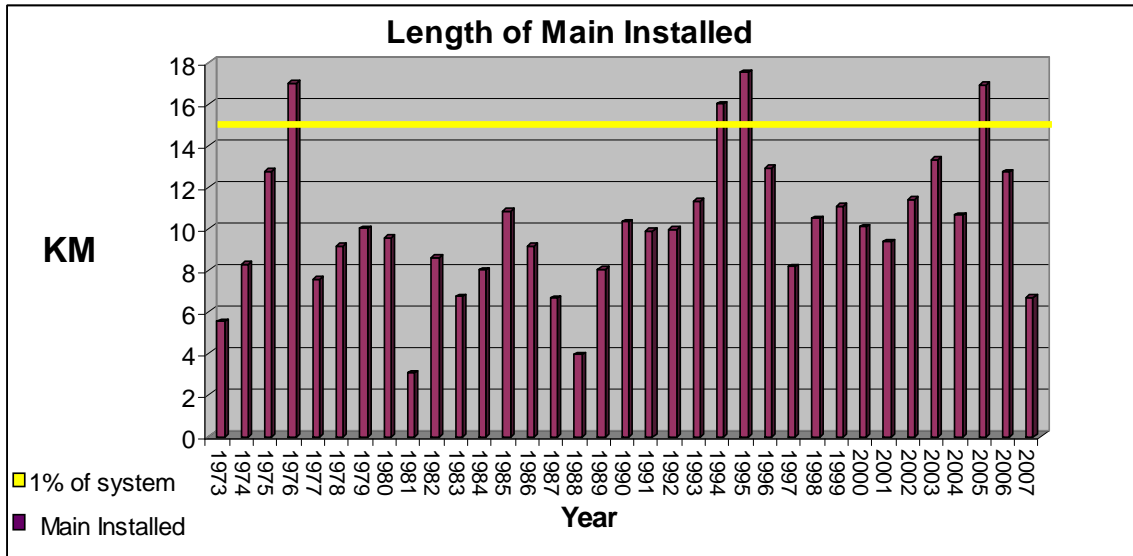
In 2007 the Sewer Utility replaced considerably less pipe than in previous years due to the break down of contract negotiations and subsequent work stoppage from mid-July to mid-October. 6.68 km of sewage pipes and 5.74 km of rainwater pipes, or a total of 12.42 km were installed in 2007. This work represents a trench length of 6.68 km or 0.45 per cent of the overall 1470 km system. The

"It was hard work,
they did a good job.
Very well done.
Thanks guys."

Customer comment



infrastructure replacement rate for 2007 is far below typical rates due to the difficulties in overcoming disputed contract negotiations.



Program Drivers:

The primary determinant of the sewer renewal program is pipe condition. In 2007, 26.57 kilometres of sewer mains were TV inspected.

Private contractors conducted these TV inspections to provide data for the Design Branch. The data was used to evaluate the condition of the mains for the sewer construction program; cracks, joint breaks, root intrusion, infiltration, sagging and to verify the location of wyes. The data is used to evaluate the condition of a main prior to relining it and for various maintenance and flooding investigations. In coordination with the Street Design Branch, sewers are also TV inspected before paving is completed.

The degree to which replacement of a pipe will advance the overall direction of sewer separation and the elimination of combined sewage overflows is also a contributing factor in creating the capital works plan.

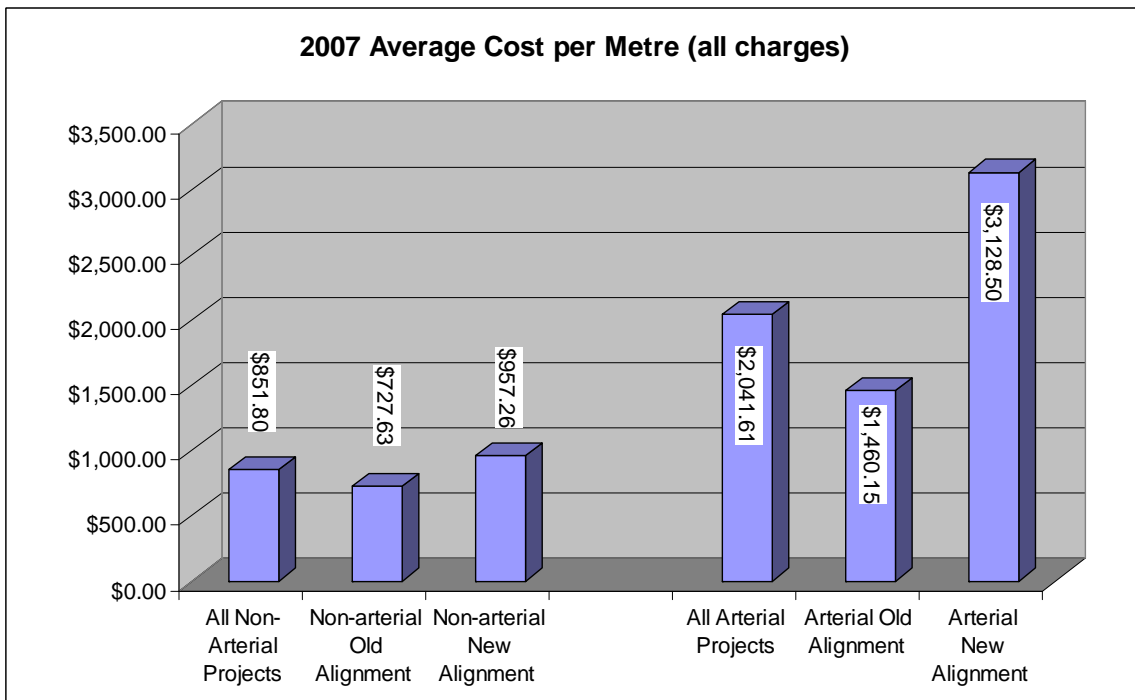
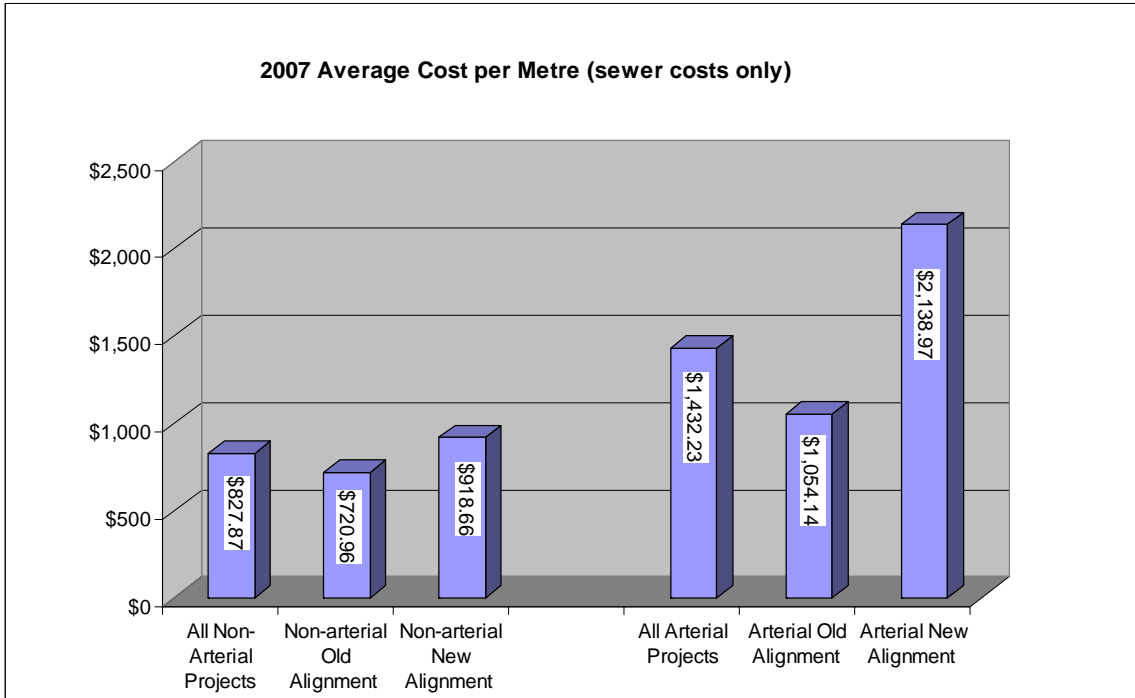
Engineers and technical staff created 64 designs for sewer replacement projects in 2007.

Main Installation Costs

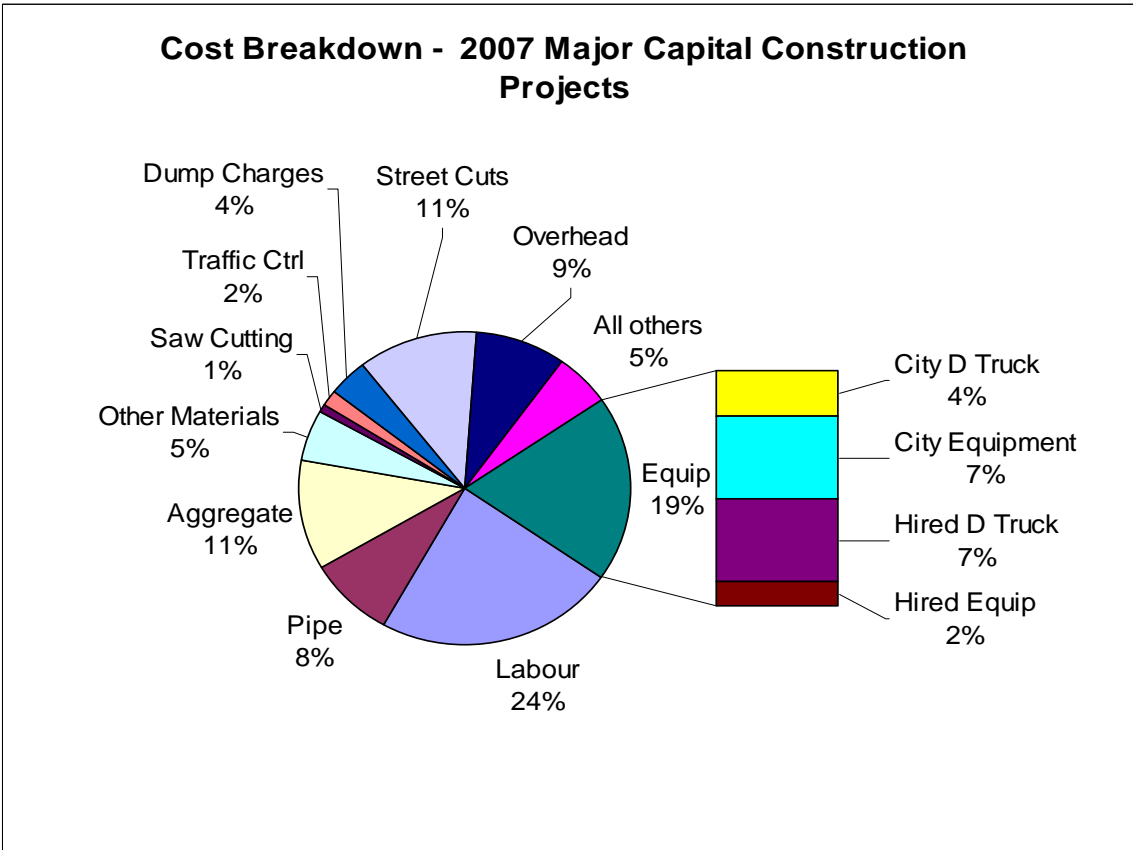
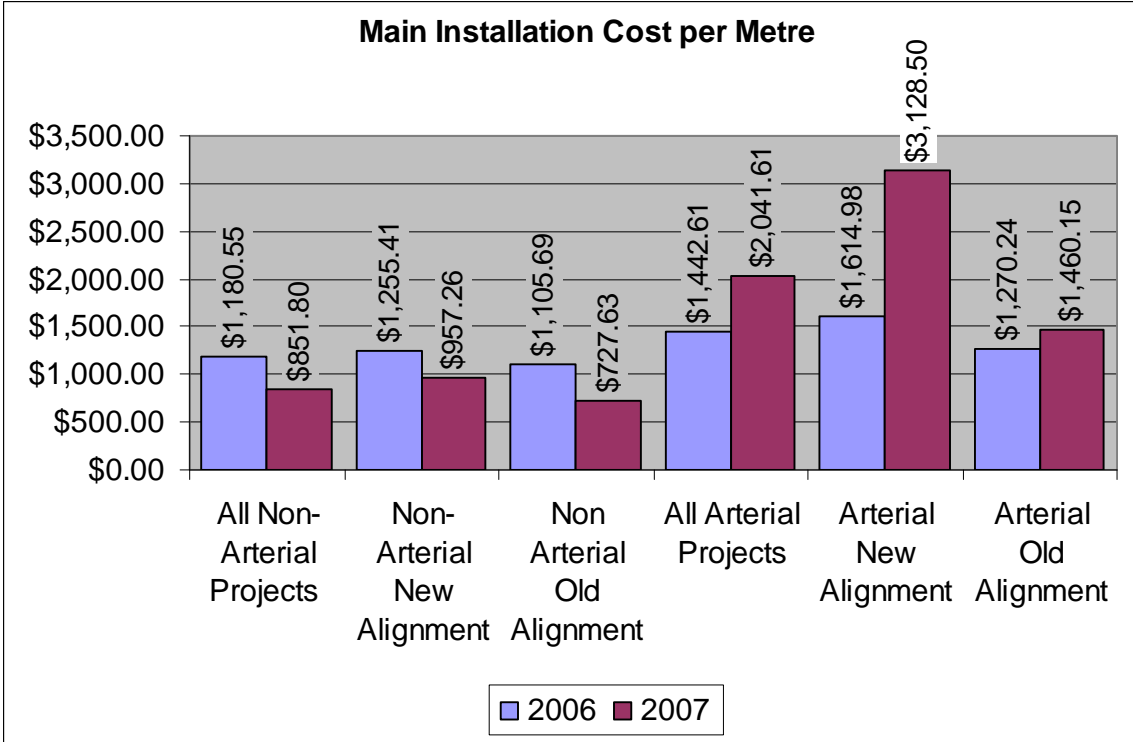
There are a number of factors specific to each location that directly affect the cost of construction.

Projects that take place on arterial streets often require more traffic control measures than on non-arterial streets, and hours of work can be limited to accommodate traffic during busy periods. Additionally installing pipes along a new alignment typically costs more than those using an old alignment because the ground conditions are more difficult for excavation.

The following chart provides information about average costs per metre for these situations:



Keeping in mind that 2007 was an unusual year for the capital construction program due to a 13 week strike, the following chart provides a cost comparison of 2006 and 2007



Our service standards optimize value for stakeholders/customers:

Maintenance is required to ensure the system continues to function at optimal levels. In 2007 the operational work program was modified considerably during the labour dispute and once forces returned to work sewer personnel were deployed to other civic priorities. Additionally the efficiencies typically achieved by the cyclical nature of maintenance work are not reflected in the data. The information presented here captures the first six months of activity in 2007 and compares it with the first six months of activity in previous years.



Sewer Main Cleaning and Inspection:

73.5 kilometres of mainline were serviced in the first half of 2007 using various cleaning techniques. This equates to approximately 4% of the entire piping network with root cutting being the most efficient method making up approximately 49% of the work performed in the first six months of 2007.

Sewer Cleaning 2007 (Mid)			
	Expense	Length Cleaned	Unit Cost per Metre
2007 (mid)	\$240,456	73,485 m	\$3.27
2006 (mid)	\$345,186	125,827m	\$2.74
2005 (mid)	\$361,820	174,131m	\$2.07

Catch Basin Cleaning

Of the 12,053 catch basins that were inspected by the middle of 2007, 6,138 catch basins required cleaning. The total cost attributed to this work category within this work program was \$403,537.80 or unit cost of \$33.48 per catch basin.

Mechanical Catch Basin Cleaning & Inspection				
Year	CB's Cleaned	Inspection only	Expense	Unit Cost
2007(Mid)	6,138	5,915	\$403,537.80	\$33.48
2006(Mid)	4,903	3,125	\$282,451.53	\$35.18
2005(Mid)	7,380	6,496	\$339,000.93	\$24.43

Disposal transfer costs associated with the Vernon Grit Facility were not included in these expenditures

Service Connection Maintenance and Repair

The Utility takes a proactive approach to service connection maintenance and repair. The average connection maintenance amount for 2007 was reported as \$5,082 and represents a 19% increase from the rate quoted for the mid mark of 2006, while showing a 9% reduction from the 2005 average cost.

Open Cut Relays			
	No. of Jobs	Expense	Average Cost
2007 (mid)	23	\$184,911	\$8,039
2006 (mid)	33	\$217,942	\$6,604
2005 (mid)	39	\$289,018	\$7,410

Connection Repairs			
	No. of Jobs	Expense	Average Cost
2007 (mid)	46	\$165,770	\$3,603
2006 (mid)	66	\$205,916	\$3,119
2005 (mid)	42	\$161,721	\$3,850

Overall Service Connection Maintenance Cost			
	No. of Jobs	Expense	Average Cost
2007 (mid)	69	\$350,681	\$5,082
2006 (mid)	99	\$423,858	\$4,281
2005 (mid)	81	\$450,740	\$5,564

Stoppages and Preventive Maintenance

City crews responded to 520 emergency calls in the first 6 months of 2007 alleviating flooding due to connection blockages. 271 or 52% of the total were deemed to be the City's responsibility, whereas, 203 or 39% were considered to be the homeowner's responsibility with shared liability resulting on 26 occasions. A comparison of blockage removals performed between 2005 and 2007 is summarized below including reimbursements and repeat occurrences.

Unstops & Engineering Reimbursements								
Year	Total Calls	*City Resp	*Private Resp.	*Shared Resp.	Incomplete	Gross Expense	Average Expense	OT Calls
2007(mid)	520	271	203	29	17	\$117,587	\$226.13	118
2006(mid)	519	317	164	16	22	\$113,816	\$219.29	89
2005(mid)	589	357	193	19	20	\$121,218	\$205.80	124

Private Plumbing Invoices/Claims Paid by Sewer Operations						
Year	No. of Claims	City Resp.	Private Resp.	Shared Resp.	Expense	Average Expense
2007(mid)	99	77	13	9	\$19,460	\$226.28
2006(mid)	72	57	0	3	\$16,726	\$278.77
2005(mid)	80	63	10	7	\$14,622	\$208.89

**City responsibility refers to visits where the cause of the blockage is determined to be the responsibility of the City. Private responsibility refers to visits where the cause of the blockage is determined to be the responsibility of the homeowner. Shared responsibility refers to blockages whereby the cause of the blockage is shared by both the City and the homeowner.*

Anticipating and Responding to Customer's Needs

Service Connections

The Utility's program providing connection designs and permits along with the preventive maintenance program are excellent examples of the capacity the Utility has developed to provide the best service to our customers.

The Connection Design Group designed and permitted 999 sewer and water connections in 2007. This total includes commercial (sewer only), residential (typically sewer and water connections) as well as reuse designs.

Preventive Maintenance Program

The preventive maintenance program has dramatically decreased the number of emergency service calls from property owners experiencing disruption due to a failing or blocked connection. In 2002 the Utility established a program of cleaning connections known to be problematic on a regular basis to prevent future blockages. Since 2002 the program has grown from 335 preventive cleaning per year to more than 2300 in 2006. In 2007 the number of prescheduled maintenance calls was increased by an additional 281 check-rods. As with previous years, this increase reflects the continued commitment by the Sewer Operations Branch to a strategy of preventing rather than reacting to emergencies. This strategy not only maintains an ongoing effort to minimize the nuisance of flooding and sewer backups, but also minimizes any disruption in the service levels for the public.



Preventive Rodding			
Year	Completed Jobs	Expense	Cost per Job
2007(Mid)	1,435	\$201,324	\$140.30
2006(Mid)	1,134	\$186,578	\$164.53
2005(Mid)	942	\$158,443	\$168.20

“Very nice, courteous crew. The site foreman was particularly helpful.”

Customer comment

In comparing the data it is apparent that the mid-mark cost associated with this service has decreased substantially. The decrease for 2007 was approximately 15 per cent or \$24.23 per service call, which amounts to an efficiency value or savings of \$34,770.05 for the first half of the year.

In 2007 the Sewer Utility began to benchmark its efforts in the areas of installing clean-outs and service line video taping and tracing. Although the data reported for the first half of 2007 shows an increased cost for these services, this is likely due to better data capture with TV tracing for each visit which takes additional time. This data will reduce the number of return visits to the same location, providing a net benefit and savings. This effort will also help the Utility to better manage the preventative rodding program by more accurately assessing pipe condition.

Additionally, the installation of clean-outs has been increased to reduce the need to coordinate schedules and appointments with home owners when service line access points are found inside the home. By installing clean-outs the Utility is better able to extend the service life of the lateral connection by allowing proper access for the tools needed to properly service and confirm the condition of the lateral line.

Clean-out Installations and TV Tracing			
Year	Completed Jobs	Expense	Cost per Job
2007(Mid)	TV: 153	\$42,473.08	\$277.60
	C/O: 24	\$24,509.44	\$1,021.23
2006(Mid)	TV: 243	\$57,019.81	\$234.65
	C/O: 27	\$25,776.52	\$954.69
2005(Mid)	TV: 139	\$31,015.63	\$223.13
	C/O: 27	\$19,377.55	\$717.69



We meet or exceed service standards and expectations to the satisfaction of stakeholders/customers

Meeting the expectations of stakeholders/customers requires communication with those people and agencies. To that end, the Sewer Utility joined forces with Vancouver's Water Utility to create a web site designed to inform, educate and engage the public on issues related to water and sewer services and functions. The web site was launched in May of 2007 and received a total of 50,000 hits before the end of the year.

Customer satisfaction surveys are distributed to a selection of properties that have received maintenance work. In 2007 more than one hundred surveys were distributed. Of the returned surveys, the average customer satisfaction rating was 9.43 out of a possible 10 points. Scores ranged from 7 to 10 on a scale of 1 to 10.

Customer service surveys are also distributed to neighbourhoods in which sewer construction projects take place and, in 2007, return a median score of four out of five, with 80 per cent rating the service received as a four or five out five.

Goal 3

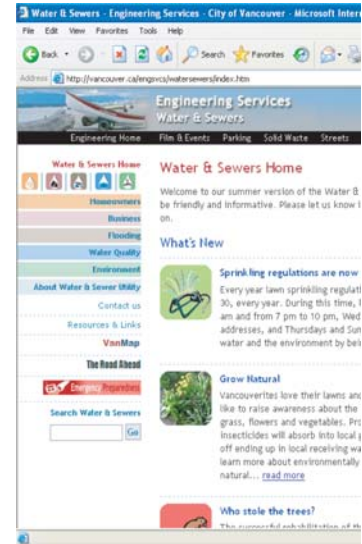
Industry Leadership:

We are a strong team of dedicated and skilled professionals excelling in a collaborative environment that encourages innovative thinking.

We attract and retain the best employees. We are the preferred employer with an energized and positive culture. The Utility's culture supports collaboration with other industry and public works professionals, innovation, leadership, recognition, and accountability.

Objectives:

- Our vision, mission, and goals are clearly communicated to and adopted by staff
- Utility is recognized for innovation and industry leadership
-



"The crew worked very hard to ensure neighbours were able to access their homes. They were very courteous."

Customer comment

Employees collaborate with other branches, departments, agencies, and other industry experts.

- Best practices and lessons learned are shared with industry
- The Utility implements leading-edge methodologies, technologies, and practices to ensure best value for our customers
- Attraction and retention of excellent employees
- Employees are recognized for their work
-

Our vision, mission, and goals are clearly communicated to and adopted by staff

The Utility's vision, mission, and goals were developed in 2007. Due to the strike and back log of work resulting from the strike, communication regarding the strategic plan was postponed until 2008.

Employees collaborate with other branches, departments, agencies, and other industry experts

Sewer Utility employees enjoyed the opportunity to collaborate with other professionals in several capacities such as:

- Metro Vancouver
- National Water and Waste Water Benchmarking Initiative
- LWMP review/update process
- Stormwater Interagency Liaison Group
- City of Vancouver Construction Coordination Committee
- Climate Change Adaptation Committee
- Water and Sewer Division Web Site
- Fraser River Estuary Management Program
- Burrard Inlet Environmental Action Program
- Port of Vancouver

Utility is recognized for innovation and industry leadership

The Utility did not receive any industry-related awards in 2007



Attraction and retention of excellent employees

Design Branch

The Design Branch has undergone a large turnover of professional staff in recent years. In the period between 2004 and 2007 the branch has seen turnover in 10 of its 15 professional positions including the Branch Manager. A competitive job market, a large number of retirements within Engineering Services, and a culture in which long term service in the Branch is not seen as beneficial to career advancement have combined to create this high rate of staff turn over.

Although there is a good deal of shuffling of unionized employees among the various positions, the actual personnel have remained stable over the same time frame.

Operations Branch

Employee Turnover Operation Branch			
	2005	2006	2007
Av. # employees	193	190	177
Resigned	11	18	23
Retired	4	2	6
New	23	20	11
Annual gain/loss	+8	0	-18

Vancouver's labour market was extremely competitive in 2007. Although most employees returned to work after the strike, many of those who had worked with other employers during the strike were recruited back to those companies near the end of 2007. The net loss of employees in 2007 is due to the lack of qualified candidates applying for employment.

The Utility implements leading-edge methodologies, technologies, and practices to ensure best value for our customers

Technological Advances:

1. Improved Sewer Cleaner:
This equipment replaces older technology and is a better ergonomic fit, more maneuverable, cleaner and safer.
2. Camera System
This portable unit allows crews to more accurately inspect connections for



blockages, pinpoint blockage locations and perform quality assurance inspections.

3. Excavator Quick Change Mechanism

This equipment allows operators to quickly and safely exchange the type of bucket on excavators. It also facilitates the transition from digging mode to lifting mode. This technology advances the goal of reducing occupational health and safety concerns.



4. Backhoe Upgrade

Replacement backhoes have been ordered with ergonomically advanced controls that improve conditions for operators. Additionally this equipment has a better bucket change mechanism.

5. Modeling Software

In 2007 the design branch acquired SWMM software to optimize the system, troubleshoot problem areas, and model future sewer separation scenarios.

6. SCADA

The SCADA re-design and replacement project was implemented by the Utility's design branch. This project will see the development of a SCADA system that ensures cross-branch functionality and compatibility. A two-staged project, SCADA re-design and replacement will see the implementation of a pilot system in two Sewer Utility pumping stations for evaluation before implementation throughout the city.

Employees are recognized for their work

Design Branch employees are recognized for outstanding work during staff meetings. Recognition includes an explanation of the challenge and strategy employed to overcome it along with a token reward.

Additionally, in 2007 connection design positions were re-classified 2 pay grades higher to reflect the complexity of this work.



Operations Branch personnel are recognized for their dedication to work as evidenced by their attendance records.

Employees recognized for dedication	
2006	78
2007	61

Goal 4

Working Environment:

We create a respectful workplace that provides the resources required to achieve our primary aim—excellence in our work.

Employees know they are valued and respected for their contributions and communicate freely and respectfully. Employees are empowered to excel in their jobs with easy and reliable access to information, data, tools, and equipment.

Objectives:

- Communication is clear, respectful and easily flows across branch, departmental, agency boundaries
- Employees know they are valued for their contributions
- Employees have easy and reliable access to the information, tools, and equipment required to excel in their work
- Corporate memory is retained and shared

Communication is clear, respectful and easily flows across branch, departmental, agency boundaries

As mentioned, Sewer Utility staff work collaboratively with staff from other branches, departments and agencies as part of their daily routines.

Employees know they are valued for their contributions

Unionized staff secured a five-year term contract in 2007. Negotiations broke down after more than a year of bargaining and were resolved after a thirteen-week strike. Exempt staff also secured terms of employment that reflect current market conditions.



While there is much work to be done repairing the relationship between staff and senior management, interpersonal relations on a daily basis are respectful.

Design Branch staff enjoy quarterly team building activities. This branch achieved 100 % participation in the corporate-wide commuter challenge in spring and sponsored a family in need over the holiday season. These activities improve morale and result in a working environment that promotes collaboration and team work.

Employees have easy and reliable access to the information, tools, and equipment required to excel in their work

The Sewer Utility is developing new ways to collect and store information that will enhance service delivery. In 2007, the Operations Branch developed a Sewer Connection Profile Database that records information related to service connections on the preventive maintenance program.

Several employees from across the Utility participated in the development of Engineering Services' Infrastructure Management Strategy project.

Training continues to be an important way to meet safety regulations and support professional and career development across the Utility. In 2007, nine different safety related courses were offered with the majority of Operations Staff attending at least one of these. Selected staff also participated in professional development courses offered through CityLearn and external educational organizations.

Corporate memory is retained and shared

With up to 25 per cent of Sewer Utility staff poised to retire within the next ten years, significant efforts are being made to retain corporate memory. In 2007 the Utility embarked on a long range planning process. Out of this planning process, a strategic plan for the Utility was developed, and a review of current documentation was conducted. This review found that many documents are in need of updating to reflect current practices. Additionally, historical information is being recorded as a result of the long range plan process.

