

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION



ANNUAL CSO PROGRESS REPORT FOR 2010

Doc Num: DEPLW0059-L2010 Rev Date: 12/3/2010

Permittee:	City of Portland	Contact Person:	Bradley A. Roland, P.E.
Address:	389 Congress Street	Telephone No.	207-874-8846
	Portland, ME 04101	MEPDES Permit No.	ME0101435
		Maine License No.	W 008010-5T-D-R

Indicates Cell Value Calculated By Spreadsheet

Indicates Cell With A Dropdown List

1. Information on Combined Sewer System

A. Current sewered population		63,008
B. Current number of residential users (connections to sewer)		14,881
C. Current number of commercial/industrial users (connections to sewer)		1,468
D. Current average residential user charge, (\$/year)	\$	407.74
E. Median Household Income (MHI), (\$/year)	\$	43,601
F. Current residential user charge expressed as percent of MHI, (%)	%	0.94
G. Original number of CSO locations at beginning of abatement program		39
H. Current number of CSO locations		32
I. Percent reduction of CSO points to date, (%)	%	18
J. List any CSOs removed in reporting year, (list individually)		

	<u>CSO #</u>	<u>Name</u>
1.	36	Capisic Pond Dam (Gorilla Cage) on December 21, 2010
2.	10C	Parson Street on May 30, 2010 - Regulator of CSO 10
3.		
4.		

K. Total sewer footage, (feet)		1,056,382
L. Original percent of combined sewer to total sewer, (%)	%	85.0
M. Current percent of combined sewer to total sewer, (%)	%	76.0
N. Percent reduction of combined sewer, (%)	%	10.6

ANNUAL CSO PROGRESS REPORT FOR 2010

2. CSO Progress

A. Are you on schedule with your approved CSO Abatement Plan? (Yes, No) **Yes**

B. If existing schedule is behind the approved schedule, list the reasons why and how the permittee proposes to catch up in order to comply with the approved schedule.

The City is currently in compliance with it's approved schedule.

C. List major accomplishments last year to reduce or abate CSOs, (list individually)

	<u>Project</u>	<u>Estimate of flow reductions</u>
1.	Wellington-Canco-Gleckler	18 Acres
2.	Berry- Chesley-Edgewood	4 Acres
3.	See additional Info	

D. Costs:

1) Total original cost estimate for complete program from initial CSO Master Plan	\$	52,000,000
2) Revised total cost estimate for complete program from Updated CSO Master Plan (includes all prior costs and update costs)	\$	104,000,000
3) Total cost of CSO abatement to date	\$	70,807,628
4) Percent complete by cost (3÷2 or 3÷1 above), (%)	%	68
5) Total SRF loans to date	\$	24,148,000
6) Total cost of CSO projects in reporting year	\$	11,218,871
7) Anticipated budget for CSO projects next year	\$	9,728,500
8) Sewer O&M budget in reporting year	\$	30,551,153
9) Anticipated sewer O&M budget for next year	\$	32,009,326
10) Estimated CSO needs for next five years (include cost in no.7)	\$	49,209,980

E. Private inflow sources:

1) Has a house to house survey been done?		(Yes, No) Yes
2) If yes, when?		2010
3) If no, is one planned?		(Yes, No)
4) If no, when?		
5) Number of roof leaders removed to date		136
6) Number of roof leaders removed in reporting year		0
7) Number of known roof leaders remaining in system		
8) Number of basement sump pumps removed to date		7
9) Number of basement sump pumps removed in reporting year		0
10) Number of known sump pumps remaining in system		
11) Number of known foundation drains to system		
12) Do you charge a surcharge for private sources?		(Yes, No) Yes
13) If yes, how much and what unit?	\$ 8	Per 100 c.f.
		(Each, Per 100 c.f.)

ANNUAL CSO PROGRESS REPORT FOR 2010

F. Other inflow sources

- | | |
|--|----------------------|
| 1) Number of catch basins removed this year | 25 |
| 2) Number of catch basins remaining in system | 5,600 |
| 3) Are there any wetlands/bogs draining to sewer? | (Yes, No) Yes |
| 4) Are there any streams intercepted by sewer? | (Yes, No) Yes |
| 5) If yes to 3 or 4, what plans are there to deal with them? | |

Continued implementation of the CSO Master Plan will result in the reduction and/or removal of direct stream/wetland connections into sewer.

G. Results of any specific flow monitoring to determine effectiveness of previous CSO abatement projects. Compare actual CSO abatement with projections made during the CSO Master Plan.

A chart of CSO Monitoring has been included in this worksheet. An evaluation in 2002 indicated an 18% reduction in CSO discharges from 1993. Monitoring by the PWD in 2010 continues to be evaluated against the SWMM for calibration of the model and population of the attached annual discharge table.

H. Yearly precipitation, CSO events, volumes, or block test data.
(Enter data on Excel spreadsheet Csoflows.xls)

I. Work done on the Nine Minimum Controls during the year.

- 1) Results of operation and maintenance (O&M) program for the sewer system and combined sewer system overflows during the year.

a. Who is responsible for combined sewer system O&M?

Name	Mike Bobinsky	Tel. No.	207-874-8801
Title	Director of Public Services		
Dept.	Department of Public Services		
Size Staff	204		

b. Inspection schedules

Number of CSO regulators	24 PWD/ 17 City	Inspection interval	Daily
Number of tide gates	6 PWD/3 City	Inspection interval	Monthly
Number of pump stations	11 PWD/16 City	Inspection interval	Daily
Number of CSO outfalls	32	Inspection interval	Quarterly

ANNUAL CSO PROGRESS REPORT FOR 2010

c.

Document the following activities that were performed and include the tons or cubic yards of debris removed last year from catch basins and sewers.

Catch Basin Cleaning

Total # of Basins

of Basins Cleaned

Last Year

Last Year

5631

1196

Debris Removed

1502 Cu. Yds.

(Please attach cleaning schedule if available)

(Tons, Cu. Yds.)

Sewer Cleaning

Total Combined

Footage Cleaned

Sewer

Last Year

1,056,382

lin. ft.

26,888

lin. ft.

Debris Removed

42 Tons

(Please attach cleaning schedule if available)

(Tons, Cu. Yds.)

Pump Station Cleaning

Cleaning Frequency

Inspection Frequency

Monthly

Daily

TV Work

Sewer & Storm Footage Televised

TV Frequency

95,597

lin. ft.

Daily

Smoke Testing

Sewer & Storm Footage Tested

Dates of Smoke Testing

0

lin. ft.

(mm/dd/yy)

Infiltration/Inflow Study

I/I Study Was Performed On

0

Linear Feet Of Sewer

ANNUAL CSO PROGRESS REPORT FOR 2010

2) Maximum Use of the Collection System for Storage

Maximum use of the collection system for storage means making relatively simple modifications to the combined sewer system to enable the system itself to store wet weather flows until downstream sewers and treatment facilities can handle them. The municipality should evaluate more complex modifications as part of the long-term control plan.

- a. List any regulators or weirs that were adjusted last year to optimize settings for maximum storage. (list individually)

1.	CSO 2 Arcadia Street had the wier raised 5 inches on 4-30-10
2.	
3.	
4.	

- b. Document attempts last year to retard inflows to the system by use of special gratings or flow control type devices.

Number of Special Storm Drain Gratings Installed
 Comments:

Number of Flow Control Type Devices Installed
 Comments:

- c. Describe any tide gate maintenance and repair to eliminate tidal intrusions. (list individually)

	<u>Tide Gate</u>	<u>Maintenance/Repair</u>
1.	3 City	Greasing and Adjusting
2.	6 PWD	Greasing and Adjusting
3.		

Attach a schedule for implementation of any minor construction associated with maximizing the collection system for storage.

ANNUAL CSO PROGRESS REPORT FOR 2010

- 3) Review any Modification of the Industrial Pretreatment Program to Assure that CSO Impacts Are Minimized

The municipality should determine whether nondomestic sources are contributing to CSO impact and, if so, investigate ways to control them. The objective of this control is to minimize the impacts of discharges into combined sewer systems from significant nondomestic sources (i.e., industrial and commercial sources during wet weather events, and to minimize CSO occurrences by modifying inspection, reporting, and oversight procedures within the approved pretreatment program.

Fill in this section only if you have nondomestic source of wastewater.

Do you have an industry that significantly impacts a CSO? (Yes, No) Yes

What measures or modifications were taken last year to insure that nondomestic sources are not contributing to CSO impacts. (Examples of measures: Inventory of nondomestic discharges to the combined sewer, assessment of nondomestic discharges on CSOs, evaluation of feasible modifications)

The City of Portland Industrial Pretreatment Program continues to work with significant Industrial/Commercial dischargers to focus their efforts in reducing their water use and to recover POTW plant capacity during storm events.

- 4) Maximization of Flow to the POTW for Treatment

Maximizing flow to the POTW entails simple modifications to the combined sewer system and treatment plant to enable as much wet weather flow as possible to reach the treatment plant. The objective of this minimum control is to reduce the magnitude, frequency, and duration of CSOs that flow untreated into receiving waters.

- a. List any change completed or planned last year to maximize flow to the POTW. (list individually)

PLANNED PHYSICAL CHANGE	ESTIMATED COST (\$)	ESTIMATED COMPLETION DATE (MM/DD/YY)	ESTIMATED YEARLY DECREASE IN EVENTS	ESTIMATED YEARLY DECREASE IN VOLUME (MGD)

ANNUAL CSO PROGRESS REPORT FOR 2010

5) Prohibition of CSO Discharges During Dry Weather

This control includes all measures taken to ensure that the combined sewer system does not overflow during dry weather flow conditions. Dry weather overflow control measures include improved O&M as well as physical changes to regulator and overflow devices.

- a. Did you have a dry weather overflow during the last year? (Yes, No)
 If yes, explain. (list individually)

1.	Warren CSO 02/05/10 Downstream pipe blockage - pipe cleaned by outside contractor
2.	Riverton Pump Station 04/25/10 Overflow at an upstream manhole due to station malfunction -
3.	Riverside Pump Station 08/31/10 Overflow due to SCADA programming error - corrective
4.	Franklin ST Pump Station 12/10/10 Station shut down for tools retrieval in wet well resulted
5.	See additional info for more

6) Control of Solid and Floatable Material in CSO Discharges

The intent of this control is to document that low cost control measures have been implemented which reduce solids and floatables discharged from CSOs to the maximum extent practicable.

- a. List any of the following control measures that were implemented last year to reduce solids and floatables discharged from CSOs. If control measures were implemented, list their Success.

Baffles in Regulators or Overflow Structures:

Number of Baffles Installed: Success:
 (Good, Fair, Poor)

Trash Racks in CSO Discharge Structures:

Number of Trash Racks Installed: Success:
 (Good, Fair, Poor)

Catch Basin Modifications:

Number of Modifications: Success:
 (Good, Fair, Poor)

ANNUAL CSO PROGRESS REPORT FOR 2010

End of Pipe Nets:

Number of Nets Installed:

Success:
(Good, Fair, Poor)

Litter Controls:

Litter Control: (Yes, No)

(Good, Fair, Poor)

Other Controls:

Type of Control

Success:
(Good, Fair, Poor)

- b. The estimated amount of solids and floatables removed last year by implementing the above control measures.

(Tons, Cu. Yds.)

(Attach any schedules and associated costs for implementation of this control.)

7) Pollution Prevention Programs That Focus on Contaminant Reduction Activities

The seventh minimum control, pollution prevention, is intended to keep contaminants from entering the combined sewer system and thus receiving water via CSOs.

- a. Document any of the following efforts last year to implement this control.

Public education or increased awareness programs that encourage water conservation and could decrease dry weather sanitary flow to the POTW and increase the volume of wet weather flows that can be treated at the POTW.

Public informational meetings to discuss CSO projects and their impacts on the environment. PWD continues education through our website and environmental coordinators. The PWD has distributed several pamphlets describing items which should not be flushed down the sewer and the affects they can have on the treatment plant and the environment.

The placement of garbage receptacles, more efficient garbage collection, or through public education you have implemented.

The City of Portland is using a single source collection of recycables to allow for quicker and more efficient collection. The Dept of Public Services, thru the waste management division, manages this program, tied to improvements to the Ecomaine MRF.

ANNUAL CSO PROGRESS REPORT FOR 2010

Street sweeping efforts with estimate of material removed.

Sweeping activities collected 1,404 cy in 2010 (excluding Capisic Brook Watershed). Sweepings activities within the CBW collected = 580 cy. Leaves clected (none from CBW) = 50 ton. The DPW is moving towards a reduction in use of sand to treat roads in the winter, and more salt. We anticipate less volume of sand/ debris to pickup in the spring.

Anti-litter campaigns; campaigns through public outreach and public service announcements employed to educate the public about effects of littering, over fertilizing, pouring used motor oil down catch basins, etc.

Public outreach continues with the e-card system at the Riverside Recycling Center. This better tracks individual household waste production and allows for universal waste recycling. The DPS has initiated a household hazardous waste dropoff program at Riverside. The PWD maintains annual educational programs through "Hydrologics" for teachers and children about the effects water, wastewater and the environment.

Efforts to eliminate illegal dumping. Programs such as law enforcement and public education aimed at controlling illegal dumping of litter, tires, and other materials into water bodies or onto the ground.

The City continues to distribute public letters to enform and curtail dumping of yard waste to Capisic Brook and Fall Brook watersheds.

b. Does the community have a hazardous waste collection program? (Yes, No) Yes

If yes, how often is it collected?

Daily - see additional info to report

If yes, how much hazardous waste is collected?

ANNUAL CSO PROGRESS REPORT FOR 2010

- c. List and describe any measures planned or implemented for the installation of best management practices (BMP) to reduce pollutants in stormwater runoff.

The City is utilizing vortex concentrating manholes, Filtera boxes and rain gardens on storm drain systems to reduce sediment and pollutants load entering the receiving waters. The City utilizes hoods in the catch basin sumps to reduce floatables from entering systemm. The City requires a 3 foot sump on all catchbasins to collect sediment and they are cleaned annually. The Planning Department provides several other alternatives for BMP within their site plan review and has adopted the Maine Chapter 500 requirements which applies to all by single

- d. List and describe other pollution prevention measures planned for implementation and the names of individuals or departments responsible. Attach any schedules and cost estimates associated with this control.

- 8) Public Notification to Ensure That the Public Receives Adequate Notification of CSO Occurrences and CSO Impacts

The objective of this control is to ensure that the public receives adequate notification of CSO impacts on pertinent water use areas. Of particular concern are beach and recreational areas that are affected by pollutants discharged in CSOs.

- a. Locations where signs are posted.

Are all CSO outfalls locations marked with a sign in accordance with your permit?

(Yes, No) Yes

List any other locations where CSO signs are posted.

- b. List dates of CSO informational public hearings or meetings last year. (list individually)

1. 06/10/10 Carlyle-Canco-
3. 9/21/2010 - Warren Ave &

2. 10/20/2010 - Bartley to Rustic
4. See Additional Info

- c. List any other measures to inform the public that occurred last year.

Weekly project email updates to public. Monthly project updates to Council. Onsite public meetings during construction.

ANNUAL CSO PROGRESS REPORT FOR 2010

9) Monitoring to Effectively Characterize CSO Impacts and the Effectiveness of CSO Controls

The ninth minimum control involves visual inspection and other simple methods to determine the occurrence and apparent impacts of CSOs. This minimum control is an initial characterization of the combined sewer system to collect and document information on overflow occurrences and known water quality problems and incidents, such as beach or shellfish bed closures, that reflect use impairments caused by CSOs. Changes in the occurrences of such incidents can provide a preliminary indication of the effectiveness of the Nine Minimum Controls.

- a. Check off and fill in information on the following monitoring methods used in overflow structures: (list individually)

Flow Meters

Locations

Frequency Data Collected

1.	See CSO Flow Monitoring Tab
2.	
3.	
4.	

After Rain Event

Blocks

Locations

Inspection Frequency

See CSO Flow Monitoring Tab

Chalklines

Locations

Inspection Frequency

Other monitoring methods?

--

ANNUAL CSO PROGRESS REPORT FOR 2010

- b. Was a SWMM model developed? (Yes, No) Yes
 Is the model used to report occurrences? (Yes, No) Yes
 Has it been updated to reflect changes: (Yes, No) Yes
 If so, when was the model last updated? (mm/dd/yy) 02/23/10

- c. CSO impacts to swimming beaches and shellfishing areas.

List any swimming beaches that may be impacted by your CSOs. (list individually)

1. East End Beach
2.

Does your community or other entity test the water quality at beaches or near your CSOs?

(Yes, No) Yes
 Frequency? 3/week

If yes, list dates of test and results

Dates	Results
3/Week (mm/dd/yy)	As posted on web Maine Healthy Beaches/ Status and Data/ East End Beach (Portland)
(mm/dd/yy)	
(mm/dd/yy)	

- Any beach closing last year? (Yes, No) Yes
 Were they caused, in whole or in part by CSOs? (Yes, No) Yes

What are the procedures for notifying the public of beach closures?

Public posting at entrance to beach and flying a colored flag. Public posting of the information is also available on the Maine Healthy Beaches website located at <http://www.mainehealthybeaches.org/>

List any shellfishing areas that may be impacted by your CSOs. (list individually)

	<u>Open</u>	<u>Conditionally Opened</u>	<u>Closed</u>
1.			Portland Area 13-A
2.			
3.			
4.			

ANNUAL CSO PROGRESS REPORT FOR 2010

Any shellfish areas closed last year?

(Yes, No)

Yes

If yes, list dates individually:

(mm/dd/yy)	Permanently Closed
(mm/dd/yy)	

If yes, were the closures caused, in whole or in part by CSOs?

(Yes, No)

Yes

Please provide a map showing any swimming beaches or shellfish area that may be impacted by your CSOs.

Please provide results of any receiving water quality tests or CSO sampling tests done last year.

- J. List any sewer extensions and new commercial or industrial flows added during the year, along with any mitigating measures implemented to prevent these flows from contributing to CSO flows.

See attached table presenting new residential, commercial or industrial developments that were issued sewer capacity letters in 2010 allowing connection to the sewer system. An expected daily flow and project status has been included with the table.

- K. To assist the DEP in making this form easier to use in future years, please list your computer capabilities:

Processor capability:

6600 @ 2.40 GHz

Operating system (Windows version):

Microsoft Windows XP Professional Service Pack 2

Word processing program and version:

Microsoft Office Word 2007

Spreadsheet program and version:

Microsoft Office Excel 2007

Database program and version:

E-mail capability and address:

brad@portlandmaine.gov

Do you plan to upgrade hardware or software next year, and if so with what?

(Note: DEP uses Windows 2000 and MS Office 2003 with Word, Excel and Access)

No

ANNUAL CSO PROGRESS REPORT FOR 2010

Please add any other information on CSOs that you feel is important, but the form did not allow for.

Please see the Additional Information to Report including: Haz Waste, Recycling, Development, Sewer Usage, and CSO Flow Monitoring tabs within this same excel file.

Template for gathering information for Annual CSO Report

ANNUAL CSO PROGRESS REPORT FOR 2010

Permittee:	City of Portland	Contact Person:	Bradley A. Roland, P.E.
Address:	389 Congress Street	Telephone No.:	207-874-8846
	Portland, Maine 04101	MEPDES Permit No.:	ME0101435
		Maine License No.:	W 008010-5T-D-R
Permittee:	Portland Water District	Contact Person:	Charlene Poulin
Address:	225 Douglass Street	Telephone No.:	207-774-5961 Ext. 3105
	Portland, Maine 04104-3553	MEPDES Permit No.:	ME 0102075
		Maine License No.:	W002671

Indicates Cell Value Calculated By Spreadsheet

Indicates Cell With A Dropdown List

- 1. Information on Combined Sewer System
- 1. A. Current sewered population **63,008**
 - 2009 population estimate - 2010 census data not yet available
 - US Census Bureau - American Factfinder -
- 1. B. Current number of residential users (connections to sewer) **14,881**
 - Tables supplied by Tom Quirk at PWD - see additional info to report
- 1. C. Current number of commercial/industrial users (connections to sewer) **1,468**

See Table Below - from the December 2010 number of bills by residential, commercial-industrial and governmental report of PWD

	Portland	Deering	Total
Residential	3,480	11,401	14,881
Commercial	752	716	1,468
Governmental	63	69	132
Total	4,295	12,186	16,481

- 1. D. Current average residential user charge, (\$/year) \$ **407.74**

The City of Portland, in the development of their financial estimates, uses the average monthly consumption between Portland and Deering in the calculations of determining their average residential user charge. As the difference between these numbers has been discussed as part of

the Tier II CSO Abatement Program review I have provided both for review in the table below.

Note that a sewer user rate change occurred on July 1, 2010. The rate was raised from \$7.64 to \$7.84 per HCF, an increase of approximately 2.6 %.

Community	Average Monthly Consumption	Average Annual Consumption (X 12 Months) HCF	Average Residential User Charge (X \$7.64/HCF) 6 months	Average Residential User Charge (X \$7.84/HCF) 6 months	Average Residential User Charge Annual
Portland	13.93	167.16	\$638.55	\$655.27	\$1,293.82
Deering	7.37	88.44	\$337.84	\$346.68	\$684.53
Average	10.65	127.80	\$488.20	\$500.98	\$989.17

It has also been requested that the City identify a specific area with just residential housing within the Deering neighborhood for evaluation against the median household income. The neighborhood encompassing the Wellwood Road CSO project was selected. This project will involve the sanitary and storm drain separation for the following streets: Wellwood Road, Hall Street, Lorraine Street, Kineo Street and Frye Street. Information provided by the Portland Water District indicates there are 75 customers within the neighborhood with an annual water consumption of 3,633 HCF for 2009. Calculations for the residential user charge are included in the following table.

Community	Average Monthly Consumption	Average Annual Consumption (X 12 Months)	Average Residential User Charge (X \$7.64/HCF) 6 months	Average Residential User Charge (X \$7.84/HCF) 6 months	Average Residential User Charge Annual
Wellwood	4.39	52.68	\$201.24	\$206.51	\$407.74

To remain consistent with previous reports the Wellwood numbers were used in the report.

Similar computations were conducted for the 9 streets off Ocean within the Clifton Street CSO service area. Those streets included: Austin, Bay View, Chenery, Codman, George, Hersey, Mackworth, Parsons, and Pya. Information provided by the Portland Water District indicates there are 275 customers within the neighborhood with an annual water consumption of 18,144 HCF for 2009. Calculations for the residential user charge are included in the following table.

Computations were also conducted for the 49 streets services through the Ivaloo combined sewer. Please see the 2010 Ivaloo Flow Characteristic sheet for more information. Information provided indicates there are 1,000 customers within the neighborhood with a monthly average water consumption of 4.5 HCF.

Community	Average Monthly Consumption	Average Annual Consumption (X 12 Months)	Average Residential User Charge (X \$7.64/HCF) 6 months	Average Residential User Charge (X \$7.84/HCF) 6 months	Average Residential User Charge Annual
-----------	-----------------------------	--	---	---	--

Clifton	5.5	66.00	\$252.12	\$258.72	\$510.84
---------	-----	-------	----------	----------	----------

1. E. Median Household Income (MHI), (\$/year) \$ 43,601
 \$43,601 - 2005-2009 American County Survey 5-Year Estimates - City of Portland, Me

1. F. Current residential user charge expressed as percent of MHI, (%) % 0.94%

Community	Average Residential User Charge Annual Per Year	% of MHI (/\$43,601) (x 100)
Portland	\$1,293.82	2.97%
Deering	\$684.53	1.57%
Average	\$989.17	2.27%

Wellwood	\$407.74	0.94%	Used in Report
Clifton	\$510.84	1.17%	

To remain consistent with previous reports the Wellwood numbers were used in the report.

1. G. Original number of CSOs at beginning of abatement program 39
 43 total for the City of Portland
 39 active CSOs when the CSO Master Plan was initiated

1. H. Current number of CSOs 32
 2010 - 32 currently active

1. I. Percent reduction of CSO points to date, (%) % 18%

1. J. List any CSOs removed in reporting year, (list individually)

	<u>CSO #</u>	<u>Name</u>
1.	36	Capisic Pond Dam (Gorilla Cage) on December 21, 2010
2.	10C	Parson Street - May 30, 2010 - Regulator of CSO 10

1. K. Total sewer footage, (feet) 1,056,382

As the City of Portland continues to develop the GIS based mapping of the sewer system more accurate records will become available. The information provided below is from the preliminary mapping that has been completed to date. The previous reporting estimates have been left as a reference.

Infrastructure	Feb-08	Feb-09	Feb-10	Jan-11	
	Record Length (Linear Feet)	Record Length (Linear Feet)	Record Length (Linear Feet)	Record Length (Linear Feet)	
Abandoned	11,792	12,001	13,087	13,080	Year Ending 2000: 1,141,575
Combined Sewer	1,043,442	944,991	849,047	805,792	Year Ended 2001: 1,144,864
Forced Main	48,824	44,980	43,156	40,983	Year Ended 2002: 1,147,364
Overflow Pipe	13,376	13,304	13,330	15,526	Year Ended 2003: 1,149,364
Sanitary Sewer	150,819	227,632	285,698	250,590	Year Ending 2004: 1,149,614
Storm Drain	464,899	488,833	502,561	536,827	2005 Total of Combined, Sanitary and Storm: 1,105,303 Linear Feet
Under drain/SD	23,091	80,505	104,435	158,865	2006: Total has not been revised: 1,105,303 LF
Comb+San+Storm	1,659,160	1,661,456			2007: From DR: Public and Private: 1,659,160
Comb+San			1,134,745	1,056,382	2008: From DR: Public and Private: 1,661,456
Combined /Total (Combined+Sanitary sewer)			75%	76%	2009: From DR: Public: 1,134,745 combined + 2010: From DR: Public: 1,056,745 combined +

1. L. Original percent of combined sewer to total sewer, (%) %
1. M. Current percent of combined sewer to total sewer, (%) %
1. N. Percent reduction of combined sewer, (%) %

2. CSO Progress

2. A. Are you on schedule with your approved CSO Abatement Plan? (Yes, No)

2. B. If existing schedule is behind the approved schedule, list the reasons why and how the permittee proposes to catch up in order to comply with the approved schedule.

The City continues is currently in compliance with it's approved schedule.

The City continues to implement CSO abatement projects nearly in conformance with the 5-Year Implementation Schedule submitted to the MeDEP in 1997 and the 8-year Implementation schedule submitted in February 2003. The City has been successful in completing many of the abatement projects on or ahead of schedule. Quarterly

2. C. List major accomplishments last year to reduce or abate CSOs, (list individually)

	<u>Project</u>	<u>Estimate of flow reductions (Gallon or Arceage)</u>
1.	Wellington - Canco - Gleckler	18 acres
2.	Berry - Chesley - Edgewood - Washington	4 Acres

3.	West Side Interceptor Replacement	
4.	Fall Brook Phase III	
5.		
6.		
7.		
8.		
9.		
10.		

2. D. Costs:

1) Total original cost estimate for complete program from CSO Master Plan \$ 52,000,000

2. D. 2) Revised total cost estimate for complete program from Updated CSO Master Plan \$ 104,000,000

2. D. 3) Total cost of CSO abatement to date \$ 70,807,628

1994	\$	4,743,000
1995	\$	873,000
1996	\$	2,216,000
1997	\$	2,049,000
1998	\$	4,462,000
1999	\$	2,173,000
2000	\$	6,200,000
2001	\$	2,482,000
2002	\$	2,171,000
2003	\$	4,932,000
2004	\$	3,077,000
2005	\$	3,931,000
2006	\$	1,980,000
2007	\$	3,824,000
2008	\$	2,259,000
2009	\$	12,216,757
2010	\$	11,218,871
	\$	<u>70,807,628</u>

2. D. 4) Percent complete by cost (3/2 above), (%) % 68%

2. D. 5) Total SRF loans to date \$ 24,148,000

2008	\$	11,135,000	SRF	
2008	\$	1,913,000	ARRA	
2009	\$	11,100,000	SRF	
2010	\$	-	SRF	Loan not taken out yet
2011				
2012				
2013				
	\$	<u>24,148,000</u>		

2. D. 6) Total cost of CSO projects in reporting year \$ **11,218,871**

**2010 Project Milestone Listing and Cost
From SRF reimbursement summaries for calendar year 2010
2008**

Expenditures Jan 1 Through the end of 2010

Construction of Fall Brook Channel Improvements	\$	103,409	2008 PR 8
Construction of Mona CSO	\$	198,026	from NS
Construction of Ray, Maine, Florida CSO	\$	214,139	2008 PR 8 and 9
Construction of Bay Street and Read Street CSO	\$	136,716	2008 PR 9
Construction of Mellen Street	\$	15,000	2008 PR 8
Construction of Clifton CSO	\$	241,796	ARRA PR 4
Construction of Capisic Brook at Forest Ave CSO	\$	78,442	ARRA PR 3 & 4
Tier III CSO Program Development	\$	362,795	2008 PR 8 and 9
2009 Preliminary Engineering	\$	203,208	2008 PR 9 and 10 (incl 2011 Pre Eng)
2009			
Construction of West Side Interceptor Replacement	\$	4,028,512	2009 PR 1, 2 and 3
Construction of Fall Brook Phase III	\$	1,570,357	2009 PR 1, 2 and 3
Construction of Wellington - Canco - Gleckler	\$	1,258,948	2009 PR 1, 2 and 3
Construction of Ocean Ave School Sewer	\$	5,393	2009 PR 2
Construction of Berry-Chesley-Edgewood	\$	1,455,276	2009 PR 1 and 2 - incl Storey PR 1&2
Construction of Burnham-Marston	\$	165,895	2009 PR 2
2010 Preliminary Engineering	\$	391,459	2009 PR 1, 2 and 3
2010			
Construction of Warren and Bishop	\$	-	
Construction of Capisic Brook Disconnect at Mount Sinai	\$	-	
Construction of Fall Brook - Phase IV	\$	-	
Construction of Carlyle-Canco-Walton & Read-Forest-Bell	\$	495,352	2010 PR 1 - thru Dearborn PR 3 - 12/24/10
2011 Preliminary Engineering			see 2008
PWD - Thompson Point - force main replacement	\$	43,566	
PWD - metering installation maintenance and tideflex valves for randall and dartmouth	\$	<u>250,584</u>	
	\$	11,218,871	

2. D. 7) Anticipated budget for CSO projects next year \$ 9,413,230

2010 CSO Annual Report		
From NS spreadsheet of project budgets		
For 2011 Construction	\$	9,284,000
PWD - Charlene Poulin - Metering	\$	129,230
	\$	9,413,230

2. D. 8) Sewer O&M budget in reporting year 30,551,153

2009 CSO Annual Report		
From Betsy Beety	FY2009 Final Allowance	\$ 19,502,000
From Steve Sloan		\$ 9,720,889
		\$ 29,222,889

2010 CSO Annual Report		
From Betsy Beety	FY2010 Final Allowance	\$ 20,830,264
From Charlene Poulin		\$ 9,720,889
		\$ 30,551,153

2. D. 9) Anticipated sewer O&M budget for next year 32,009,326

2008 Report			
	From Betsy Beety	FY2009 Final Appropriation	\$ 19,502,000
	From Steve Sloan		

2009 Report			
	From Betsy Beety	FY2010 Final Appropriation	\$ 20,830,264
	From Steve Sloan		\$ 9,720,889
			\$ 30,551,153

2010 Report			
	From Betsy Beety	FY2011 Final Appropriation	\$ 21,254,282
	From Charlene Poulin	O&M	\$ 10,540,044
	From Charlene Poulin	Arcadia/ Thompson PS pumps - valves	\$ 215,000
			\$ 32,009,326

2. D. 10) Estimated CSO needs for next five years (include cost in no.7) \$ 49,209,980

2010 Report	
PWD - Charlene Poulin Metering & Maintenance	\$ 646,150.00
PWD - Charlene Poulin Tide Gates/ Valves	\$ 100,000.00
2010 Construction - From Line D7 above	\$ 9,413,230
2011 Construction - From Tier II Update - January 29, 2009	\$ 9,284,000
2012 Construction - From Tier II Update - January 29, 2009	\$ 7,666,000
2013 Construction - From Tier II Update - January 29, 2009	\$ 12,100,600
2014 Construction - Unknown at this time - Estimated at \$10M	\$ 10,000,000
	<u>\$ 49,209,980</u>

2. E. Private inflow sources:

2. E. 1) Has a house to house survey been done? (Yes, No) Yes

2. E. 2) If yes, when? 2010
Individual home questionnaire distributed as part of the neighborhood meetings for all projects

2. E. 3) If no, is one planned? (Yes, No)

2. E. 4) If no, when?

2. E. 5) Number of roof leaders removed date 136

1992/1993	55
1998	
1999	
2000	
2001	
2002	
2003	
2004	
2005	
2006	4
2007	59
2008	4
2009	14
2010	
Total	<u>136</u>

2. E. 6) Number of roof leaders removed in reporting year
0

0

2. E. 7) Number of known roof leaders remaining in system

Unknown

2. E. 8) Number of basement sump pumps removed to date

7

1998	
1999	
2000	
2001	
2002	
2003	
2004	
2005	
2006	
2007	
2008	7
2009	0
2010	0
Total	<u>7</u>

2. E. 9) Number of basement sump pumps removed in reporting year

0

2. E. 10) Number of known sump pumps remaining in system

Unknown

2. E. 11) Number of known foundation drains to system

Unknown

2. E. 12) Do you charge a surcharge for private sources?

(Yes, No)

Yes

2. E. 13) If yes, how much and what unit?

\$ **7.84**

Per 100 c.f.

(Each, Per 100 c.f.)

2. F. Other inflow sources

2. F. 1) Number of catch basins removed this year

25

1	Fall Brook Channel Phase III
11	Wellington-Canco-Gleckler
0	WSIS
13	Berry-Chesley-Edgewood

- 2. F. 2) Number of catch basins remaining in system 5,600
- 2. F. 3) Are there any wetlands/bogs draining to sewer? (Yes, No) Yes
- 2. F. 4) Are there any streams intercepted by sewer? (Yes, No) Yes
- 2. F. 5) If yes to 3 or 4, what plans are there to deal with them?

Continued implementation of the CSO Master Plan will result in the reduction and/or removal of direct stream/wetland connections into sewer.

- 2. G. Results of any specific flow monitoring to determine effectiveness of previous CSO abatement

A chart of CSO Monitoring has been included in this worksheet. An evaluation in 2002 indicated an 18% reduction in CSO discharges from 1993. Monitoring by the PWD in 2010 continues to be evaluated against the SWMM for calibration of the model and population of the attached annual discharge table.

- 2. H. Yearly precipitation, CSO events, volumes, or block test data.
(Enter data on Excel spreadsheet Csoflows.xls)
- 2. I. Work done on the Nine Minimum Controls during the year.
- 2. I. 1) Results of operation and maintenance (O&M) program for the sewer system and combined sewer system overflows during the year.
- 2. I. 1) a. Who is responsible for combined sewer system O&M?

Name	Mike Bobinsky
Title	Director of Public Services
Dept.	Department of Public Services
Size Staff	204

Tel. No. 207-874-8801

Name	Charlene Poulin
Title	Chief Operator Wastewater Systems
Dept.	Portland Water District
Size Staff	11

Tel. No. 207-774-5961

- 2. I. 1) b. Inspection schedules
- | | |
|--------------------------|------------------------|
| Number of CSO regulators | 24 PWD/ 17 City |
| Number of tide gates | 6 PWD/3 City |

Inspection interval	Daily/ As Needed
Inspection interval	Monthly

Number of pump stations
 Number of CSO outfalls

11 PWD/16 City
32

Inspection interval
 Inspection interval

Daily
Quarterly

2. I. 1) c. Document the following activities that were performed and include the tons or cubic yards of debris removed last removed last year from catch basins and sewers.

Catch Basin Cleaning

Total # of Basins Last Year	# of Basins Cleaned Last Year	Debris Removed	
5631	1196	1502	CY
		(Tons, Cu. Yds.)	

Year	Total # of Basins	# of Basins Cleaned	Debris Removed	Unit	Contact Person
2000					
2001					
2002	5000+	4888	6145	CY	
2003	5000+	4375	5332	CY	
2004	5000+	4392	7263	CY	
2005	5000+	8231	16721	CY	
2005 - Peaks Island		103	24	CY	
2006	6300	5640	10135	CY	
2007	5375	5375	8816	CY	
2008	5552	1720	6100	Ton	Harold Downs
2008 - Peaks Island		120			
2009	5631	3633	790	Ton	John Emerson
2010	5631	1196	1502	CY	John Emerson

Sewer Cleaning

Total Combined Sewer	lin. ft.	Footage Cleaned Last Year	lin. ft.	Debris Removed	
1,056,382		26,888		42	Tons
				(Tons, Cu. Yds.)	

Year	Total Comb Sewer	Footage Cleaned	Debris Removed	Unit	Contact Person
2000					
2001					
2002	631050	64023	202	CY	
2003	631050	59348	187	CY	
2004	631050	54937			
2004 - PWD		1500			Steve Sloan
2005	631050	59687			
2005 - PWD		1500			Steve Sloan
2006	1105303	93063	64	CY	

2007	6300	247942	106	Ton	
2008		31053	159	Ton	John Emerson
2008 - PWD		3000			Steve Sloan
2009	1134745	44749	88	Ton	John Emerson
2010	1056382	26888	42.35		John Emerson

Pump Station Cleaning

Cleaning Frequency

Monthly	City
Quarterly	PWD

Inspection Frequency

Daily	City
Daily	PWD

Year	Grease Removed	Unit	Contact Person
2000			
2001			
2002 - PWD	49.6	Ton	
2003	1.5	Ton	
2003 - PWD	114.23	Ton	
2004	1296	CY	
2004 - PWD	29.96	Ton	
2005	12	Ton	
2005 - PWD	70	Ton	
2006	21.5	Ton	
2006- PWD	30	Ton	
2007			
2008	15.6	Ton	John Emerson
2008 - PWD	27.76	Ton	Steve Sloan
2009	11.21	Ton	John Emerson
2010	13.75	Ton	John Emerson
2010 - PWD	35.73	Ton	Charlene Poulin

TV Work

Sewer & Storm Footage Televised

?	lin. ft.
---	----------

TV Frequency

Daily

Information from Harold Downs - software package XP

Year	Sewer Televised	Storm Televised	Contact Person
2000			
2001			
2002	31374		
2002 - Peaks Island	7200		
2003	31941		

2004	18714			
2004 - PWD	1800			
2005	32660	9602		
2006	43031	12657		
2007				
2008	56000		John Emerson	
2008 - PWD	8000		Steve Sloan	
2009	62755	12125	Harold Downs	
2010	57298	38299	Harold Downs	
2010 - PWD	5000		Charlene Poulin	Commercial Street

Smoke Testing

Sewer Footage Smoke Tested

lin. ft.

Information from John Emerson

Dates of Smoke Testing

(mm/dd/yy)

Infiltration/Inflow Study

Sewer Footage Study Was Performed On

lin. ft.

Information from John Emerson

2. I. 2) Maximum Use of the Collection System for Storage

Maximum use of the collection system for storage means making relatively simple modifications to the combined sewer system to enable the system itself to store wet weather flows until downstream sewers and treatment facilities can handle them. The municipality should evaluate more complex modifications as part of the long-term control plan.

2. I. 2) a. List any regulators or weirs that were adjusted last year to optimum settings for maximum storage. (list individually)

1. **CSO 2 Arcadia Street had the wier raised 5 inches on 4-30-10**
2.
3.
4.

2. I. 2) b. Document attempts last year to retard inflows to the system by use of special gratings or flow control type devices.

Number of Special Storm Drain Gratings Installed

Comments:

Number of Flow Control Type Devices Installed

0

Comments:

- 2. I. 2) c. Describe any tide gate maintenance and repair to eliminate tidal intrusions. (list individually)

	<u>Tide Gate</u>	<u>Maintenance/Repair</u>
1.	3 City	Greasing and Adjusting
2.	6 PWD	Greasing and Adjusting
3.		
4.		

Attach a schedule for implementation of any minor construction associated with maximizing the collection system for storage.

- 2. I. 3) Review and Modification of the Industrial Pretreatment Program to Assure that CSO Impacts Are Minimized

The municipality should determine whether nondomestic sources are contributing to CSO impact and, if so, investigate ways to control them. The objective of this control is to minimize the impacts of discharges into combined sewer systems from significant nondomestic sources (i.e., industrial and commercial sources during wet weather events, and to minimize CSO occurrences by modifying inspection, reporting, and oversight procedures within the approved pretreatment program.

Fill in this section only if you have nondomestic source of wastewater.

Do you have an industry that significantly impacts a CSO?

(Yes, No)

No

What measures or modifications were taken last year to insure that nondomestic sources are not contributing to CSO impacts. (Examples of measures: Inventory of

The City of Portland Industrial Pretreatment Program continues to work with significant Industrial/Commercial dischargers to focus their efforts in reducing their water use and to recover POTW plant capacity during storm events.

- 2. I. 4) Maximization of Flow to the POTW for Treatment

Maximizing flow to the POTW entails simple modifications to the combined sewer system and treatment plant to enable as much wet weather flow as possible to reach the treatment plant. The objective of this minimum control is to reduce the magnitude, frequency, and duration of CSOs that flow untreated into receiving waters.

- 2. I. 4) a. List any change, completed or planned last year to maximize flow to the POTW. (list individually)

PLANNED PHYSICAL CHANGE	ESTIMATED COST (\$)	ESTIMATED COMPLETION DATE (MM/DD/YY)	ESTIMATED YEARLY DECREASE IN EVENTS	ESTIMATED YEARLY DECREASE IN VOLUME (MGD)

2. I. 5) Prohibition of CSO Discharges During Dry Weather

This control includes all measures taken to ensure that the combined sewer system does not overflow during dry weather flow conditions. Dry weather overflow control measures include improved O&M as well as physical changes to regulator and overflow devices.

2. I. 5) a. Did you have a dry weather overflow during the last year?
If yes, explain. (list individually)

(Yes, No)

Yes

1. **Warren CSO 42 02/05/10 Downstream pipe blockage - pipe cleaned by outside contractor**
2. **Riverton Pump Station 04/25/10 Overflow at an upstream manhole due to station malfunction - corrective measures taken**
3. **Riverside Pump Station 08/31/10 Overflow due to SCADA programming error - corrective programming implemented**
4. **Franklin ST Pump Station 12/10/10 Station shut down for tools retrieval in wet well resulted in overflow**
5. **Northeast Pump Station 06/08/10 Clogging of screen at treatment plant - unclogged and adjusted with manufacturer**
6. **Thompsons Point PS 02/17/10, 06/02/10, 12/06/10, 12/28/10 Rags clogging the oriface plate - All of these CSO incidences were caused by rags plugging the oriface plate or pipe. In June, 2010 PWD and City of Portland IPT met with Amtrak officials on the matter. Amtrak had been discharging in a manhole upstream of the oriface plate. Amtrak changed the point of discharge to a manhole downstream of the oriface plate. PWD, City of Portland IPT have been working on solutions to narrow down the cause. A flow meter was installed in June 2010 which now alerts to when the CSO is active and sends an alarm. PWD has been inspecting structure visually three times a week, jetting the line weekly and The City has televised the line and communicated with the businesses about not flushing rags.**
- 7.
- 8.
- 9.
- 10.

2. I. 6) Control of Solid and Floatable Material in CSO Discharges

The intent of this control is to document that low cost control measures have been implemented which reduce solids and floatables discharged from CSOs to the maximum extent practicable.

2. I. 6) a. List any of the following control measures that were implemented last year to reduce solids and floatables discharged from CSOs.

Baffles in Regulators or Overflow Structures:

Number of Baffles Installed:

0

Success:

(Good, Fair, Poor)

Trash Racks in CSO Discharge Structures:

Number of Trash Racks Installed:

1 - Mackworth St

Success:

Good

CSO 10 - Mackworth St. had a floatables control screen (Hydrovex fluidscren oscillating static screen) installed on March 25, 2010.

Catch Basin Modifications:

Number of Modifications:

0

Success:

(Good, Fair, Poor)

End of Pipe Nets:

Number of Nets Installed:

0

Success:

(Good, Fair, Poor)

Litter Controls:

Litter Control:

(Yes, No)

Yes

Good

(Good, Fair, Poor)

Other Controls:

Type of Control

Success:

(Good, Fair, Poor)

2. I. 6) b. The estimated amount of solids and floatables removed last year by implementing the above control measures.

(Tons, Cu. Yds.)

(Attach any schedudels and associated costs for implementation of this control.)

2. I. 7) Pollution Prevention Programs That Focus on Contaminant Reduction Activities

The seventh minimum control, pollution prevention, is intended to keep contaminants from entering the combined sewer system and thus receiving water via CSOs.

2. I. 7) a. Document any of the following efforts last year to implement this control.

Public education or increased awareness programs that encourage water conservation and could decrease dry weather sanitary flow to the POTW and increase the

Public informational meetings to discuss CSO projects and their impacts on the environment. PWD continues education through our website and environmental coordinators. The PWD has distributed several pamphlets describing items which should not be flushed down the sewer and the affects they

can have on the treatment plant and the environment.

The placement of garbage receptacles, more efficient garbage collection, or through public education you have implemented.

The City of Portland is using a single source collection of recyclables to allow for quicker and more efficient collection. The Dept of Public Services, thru the waste management division, manages this program, tied to improvements to the Ecomaine MRF.

Street sweeping efforts with estimate of material removed.

Contact Person Robert Giampetruzi

Sweeping activities collected 1,404 cy in 2010 (excluding Capisic Brook Watershed). Sweepings activities within the CBW collected = 580 cy. Leaves clected (none from CBW) = 50 ton. The DPW is moving towards a reduction in use of sand to treat roads in the winter, and more salt. We anticipate less volume of sand/ debris to pickup in the spring.

Anti-litter campaigns; campaigns through public outreach and public service announcements employed to educate the public about effects of littering, over fertilizing,

Public outreach continues with the e-card system at the Riverside Recycling Center. This better tracks individual household waste production and allows for universal waste recycling. The DPS has initiated a household hazardous waste dropoff program at Riverside.

Efforts to eliminate illegal dumping. Programs such as law enforcement and public education aimed at controlling illegal dumping of litter, tires, and other materials

The City continues to distribute public letters to enform and curtail dumping of yard waste to Capisic Brook and Fall Brook watersheds.

2. I. 7) b. Does the community have a hazardous waste collection program? (Yes, No) Yes

If yes, how often is it collected? Daily - see additional info to report

Info from Troy Moon

If yes, how much hazardous waste is collected? ? units (1 unit = 5 gallons)

Year	Collected	Contact Person
2009	2437	Troy Moon
2010	?	Troy Moon

2. I. 7) c. List and describe any measures planned or implemented for the installation of best management practices (BMP) to reduce pollutants in stormwater runoff.

The City is utilizing vortex concentrating manholes, Filtera boxes and rain gardens on storm drain systems to reduce sediment and pollutants load entering

the receiving waters. The City utilizes hoods in the catch basin sumps to reduce floatables from entering systemm. The City requires a 3 foot sump on all catchbasins to collect sediment and they are cleaned annually. The Planning Department provides several other alternatives for BMP within their site plan review and has adopted the Maine Chapter 500 requirements which applies to all by single family home construction.

2. I. 7) d. List and describe other pollution prevention measures planned for implementation and the names of individuals or departments responsible. Attach any schedules and cost estimates associated with this control.

2. I. 8) Public Notification to Ensure That the Public Receives Adequate Notification of CSO Occurrences and CSO Impacts

The objective of this control is to ensure that the public receives adequate notification of CSO impacts on pertinent water use areas. Of particular concern are beach and recreational areas that are affected by pollutants discharged in CSOs.

2. I. 8) a. Locations where signs are posted.

Are all CSO outfalls locations marked with a sign in accordance with your permit?

(Yes, No)

Yes

List any other locations where CSO signs are posted.

2. I. 8) b. List dates of CSO informational public hearings or meetings last year. (list individually)

1. **06/10/10 Carlyle-Canco-Walton&Read-**

3. **9/21/2010 - Warren Ave & Capisic Brook**

2. **West Side Interceptor - Various dates Fall 2010**

4. **10/20/2010 - Bartley to Rustic & Alpine to Hillside Neighborhood**

06/10/10 Carlyle-Canco-Walton & - Read-Forest-Bell

West Side Interceptor - various dates during construction Summer/ Fall 2010

9/21/2010 - Warren Ave & Capisic Brook Disconnect Neighborhood Mtg

10/20/2010 - Bartley to Rustic & Alpine to Hillside Neighborhood Mtg

10/28/2010 - Fall Brook 4 Neighborhood Mtg

2. I. 8) c. List any other measures to inform the public that occurred last year.

Weekly project email updates to public. Monthly project updates to Council.

2. I. 9) Monitoring to Effectively Characterize CSO Impacts and the Effectiveness of CSO Controls

The ninth minimum control involves visual inspection and other simple methods to determine the occurrence and apparent impacts of CSOs. This minimum control is an initial characterization of the combined sewer system to collect and document information on overflow occurrences and known water quality problems and incidents, such as beach or shellfish bed closures, that reflect use impairments caused by CSOs. Changes in the occurrences of such incidents can provide a preliminary indication of the effectiveness of the Nine Minimum Controls.

2. I. 9) a. Check off and fill in information on the following monitoring methods used in overflow structures: (list individually)

Flow Meters

Locations

Frequency Data Collected

1.	See CSO Flow Monitoring Tab
2.	
3.	
4.	

Daily

Blocks

Locations

Inspection Frequency

See CSO Flow Monitoring Tab

Chalklines

Locations

Inspection Frequency

Other monitoring methods?

A chart of CSO Monitoring has been included in this worksheet. Those sites which currently do not have real time monitoring are scheduled for 2010.

2. I. 9) b.	Was a SWMM model developed?	(Yes, No)	Yes
	Is the model used to report occurrences?	(Yes, No)	Yes
	Has it been updated to reflect changes:	(Yes, No)	Yes
	If so, when was the model last updated?	(mm/dd/yy)	02/23/10

2. I. 9) c. CSO impacts to swimming beaches and shellfishing areas.

List any swimming beaches that may be impacted by your CSOs. (list individually)

1.	East End Beach
2.	

Does your community or other entity test the water quality at beaches or near your CSOs?

Frequency?	(Yes, No)	Yes
		3/week

If yes, list dates of test and results

Dates	Results
3/Week (mm/dd/yy)	As posted on web Maine Healthy Beaches/ Status and Data/ East End Beach (Portland)
(mm/dd/yy)	
(mm/dd/yy)	

Any beach closing last year?	(Yes, No)	Yes
Were they caused, in whole or in part by CSOs?	(Yes, No)	Yes

What are the procedures for notifying the public of beach closures?

Public posting at entrance to beach and flying a colored flag. Public posting of the information is also available on the Maine Healthy Beaches website located at <http://www.mainehealthybeaches.org/>

List any shellfishing areas that may be impacted by your CSOs. (list individually)

	<u>Open</u>	<u>Conditionally Opened</u>	<u>Closed</u>
1.			Portland Area 13-A
2.			
3.			
4.			

Any shellfish areas closed last year?	(Yes, No)	Yes
If yes, list dates individually:		

(mm/dd/yy)	Permanently Closed
(mm/dd/yy)	

A legal notice and map prepared by the Department of Marine Resources entitled "C13A Portland – Falmouth – Legal Notice of Shellfish Closure Area" is contained in Attachment F

If yes, were the closures caused, in whole or in part by CSOs?

(Yes, No)

Yes

Please provide a map showing any swimming beaches or shellfish area that may be impacted by your CSOs.

Please provide results of any receiving water quality tests or CSO sampling tests done last year.

2. J. List any sewer extensions and new commercial or industrial flows added during the year, along with any mitigating measures implemented to prevent these flows from

See attached table presenting new residential, commercial or industrial developments that were issued sewer capacity letters in 2009 allowing connection to the sewer system. An expected daily flow and project status has been included with the table.

From Frank Brancely

2. K. To assist the DEP in making this form easier to use in future years, please list your computer capabilities:

Processor capability:	6600 @ 2.40 GHz
Operating system (Windows version):	Microsoft Windows XP Professional Service Pack 2
Word processing program and version:	Microsoft Office Word 2007
Spreadsheet program and version:	Microsoft Office Excel 2007
Database program and version:	
E-mail capability and address:	brad@portlandmaine.gov

Do you plan to upgrade hardware or software in 2007, and if so with what?

(Note: DEP uses Windows 2000 and MS Office 2003 with Word, Excel and Access)

Please add any other information on CSOs that you feel is important, but the form did not allow for.

Please see the Additional Information to Report including: Haz Waste, Recycling, Development, Sewer Usage, and CSO Flow Monitoring tabs within this same excel file.

Riverside M-T-D Report:
YEAR 2010

Date	5129-TVs			5130-TVs Consoles			5131-Monitors -17"			5132-Monitors +17"		
	MH	COP	NCOP	MH	COP	NCOP	MH	COP	NCOP	MH	COP	NCOP
January	142	24	16	8	0	0	30	24	47	4	1	1
February	138	10	9	14	0	0	88	54	10	9	11	0
March	303	26	26	24	0	2	116	22	8	10	1	0
April	295	61	13	28	0	0	160	40	6	13	4	0
May	190	6	4	5	0	0	92	17	6	8	2	0
June	327	9	3	25	0	0	144	10	3	17	2	0
July	287	92	31	20	4	0	155	65	33	12	1	2
August	347	96	40	10	0	0	113	34	21	15	6	1
September	267	22	9	37	0	0	114	22	45	5	6	2
October	409	40	1	17	0	0	177	55	3	5	2	0
November	249	29	3	11	0	1	84	44	13	6	4	1
December	426	28	3	25	0	0	176	43	8	9	15	6
Totals	3,380	443	158	224	4	3	1,449	430	203	113	55	13

MH means Maine Household -- so it came from a residential source outside of Portland
COP means City of Portland -- so the item came from a source in Portland
NCOP means not City of Portland -- so the item came from somewhere other than Portland

5142-U & O Lamps	5141- Crushed, Coated, CFL & HID		5150- Alkaline, NiCd, NiMH & Li-Ion		5152- Button, NiLi & Lithium		5145- Battery Comingle Fees		5144-Lead Acid Batteries		5155-PCB Ballasts	
	NCOP	COP	NCOP	COP	NCOP	COP	NCOP	COP	NCOP	COP	NCOP	COP
23	430	108	137	34	0	0	54	13	1,344	336	491	123
9	10	2	0	0	36	9	36	9	0	0	0	0
28	140	35	542	136	5	1	334	83	0	0	560	140
31	326	82	442	111	0	0	187	47	1,520	380	0	0
26	0	0	240	60	0	0	204	51	0	0	135	34
8	304	76	379	95	0	0	379	95	1,824	456	151	38
33	342	86	386	97	0	0	368	93	1,488	372	71	18
18	414	104	293	73	0	0	293	73	0	0	80	20
50	62	27	153	65	0	0	140	60	1,872	468	215	92
13	241	60	503	126	0	0	480	120	0	0	389	97
26	165	41	330	82	0	0	322	80	1,664	416	69	17
3	121	30	146	37	0	0	134	34	1,936	484	71	18
268	2,555	651	3,551	916	41	10	2,931	758	11,648	2,912	2,232	597

5156-Non PCB & Magnetic & Elec.			5157- Large Capacitat ors			5158- Small Capacitat ors			5138-All Mercury Devices		
LBS	Ballasts		LBS			LBS			LBS		
COP	NCOP		COP	NCOP		COP	NCOP		COP	NCOP	
1,036	259		0	0		70	18		20	5	
531	133		0	0		26	7		0	0	
296	74		0	0		48	12		0	0	
444	123		28	7		46	11		0	0	
275	69		0	0		25	6		0	0	
1,322	331		28	7		85	22		14	3	
289	72		0	0		65	16		0	0	
61	15		0	0		74	19		0	0	
214	92		17	7		73	32		0	0	
534	133		64	16		96	24		6	1	
934	233		25	6		40	10		0	0	
240	60		0	0		42	11		22	6	
6,176	1,594		162	43		690	188		62	15	

see 2010 Portland Recycles From Troy Moon
in pdf form

"L"										
24	18	Luther Street, Peaks Island				776				
"M"										
22	32	Maplewood Street			R	360				
33	48	Moody Street			R	3,600				
9	9	Morse Street			R	360				
"N"										
"O"										
7	72	Oak Street			R	2,380				
"P"										
1	21	Popham Street	C			405				
31	273	Presumpscot Street			R	105				
"Q"										
"R"										
10	568	Riverside Street		I		225				
19	568-658	Riverside Street	C	I		16,214				
"S"										
2	201-203	State Street			R	-82	0.2908	Franklin	17	Back Cove Alms House
"T"										
"U"										
"V"										
"W"										
14	978	Washington Avenue		I		50				
29	218	Washington Avenue			R	180				
26	171	Warren Avenue	C			217				
34	1581	Westbrook Street	C			28,960				
32	27	Wilkie Street			R	270				
"X"										
"Y"										
5	231	York Street	C			1,151				
"Z"										

Portland Residential Sewer Usage HCF (2010)

	Portland			Deering		
	# of bills	Consump	Ave Cons	# of bills	Consump	Ave Cons
January	3,476	48,976	14.09	11,363	85,641	7.54
February	3,481	49,978	14.36	11,362	77,072	6.78
March	3,480	47,281	13.59	11,364	80,164	7.05
April	3,481	45,931	13.19	11,377	72,815	6.40
May	3,483	46,034	13.22	11,368	77,229	6.79
June	3,485	44,460	12.76	11,384	84,120	7.39
July	3,485	51,589	14.80	11,391	87,150	7.65
August	3,481	50,594	14.53	11,368	94,173	8.28
September	3,484	49,530	14.22	11,387	98,824	8.68
October	3,482	51,734	14.86	11,389	88,351	7.76
November	3,479	48,531	13.95	11,393	78,547	6.89
December	<u>3,480</u>	<u>47,458</u>	<u>13.64</u>	<u>11,398</u>	<u>82,798</u>	<u>7.26</u>
	41,777	582,096	13.93	136,544	1,006,884	7.37
Portland	41,777	582,096	13.93			
<u>Deering</u>	<u>136,544</u>	<u>1,006,884</u>	<u>7.37</u>			
Ave Resid	178,321	1,588,980	8.91			

December - # of bills by Residential, Commercial-Industrial & Governmental

	Portland	Deering	Total
Residential	3,480	11,401	14,881
Comm-Indust	752	716	1,468
Governmental	<u>63</u>	<u>69</u>	<u>132</u>
	4,295	12,186	16,481

Annual sewer usage for 5 streets off Ocean Ave. (Frye, Hall, Kineo, Loraine and Wellwood)

Annual HCF	3,585.00
# of Customers	68.00
Monthly Average	4.39

Annual sewer usage for 9 streets off Ocean Ave. (Austin, Bay View, Chenery, Codman, George, Hersey, Mackworth, Parsons, Pya)

Annual HCF	18,853.00
# of Customers	263.00
Monthly Average	5.97

Receiving Water	CSO	Location	Monitoring Type/Collection Freq.	Status
Back Cove	005	Randall Street	Remote/Daily	In Service
	006A	Johansen Street	Remote/Daily	In Service
	006B	Johansen Street	Remote/Daily	In Service
	007	Ocean Avenue	Remote/Daily	In Service
	008	Clifton Street	Remote/Daily	In Service
	009	George Street	Visual/As needed	Block Data
	010A	Austin Street	Visual/As needed	Block Data
	010B	Mackworth Street	Remote/Daily	In Service
	010C	Parsons Street	Closed	Removed
	011A	Chenery Street	Visual/As needed	Block Data
	011B	Codman Street	Visual/As needed	Block Data
	012	Vannah Avenue	Remote/Daily	In Service
	013A	Belmont Street	Remote/Daily	In Service
	013B	Forest Ave at Ashmont	Remote/Daily	In Service
	013C	Ashmont at Forest Ave	Remote/Daily	In Service
	014	Coyle Street at Great Lost Bear	Remote/Daily	In Service
	015A	Forest Ave at Dartmouth	Remote/Daily	In Service
	015B	Dartmouth at Baxter	Remote/Daily	In Service
	016A	Bedford Street	Remote/Daily	In Service
016B	Bank Street	Remote/Daily	In Service	
017	Preble Street at Marginal Way	Remote/Daily	In Service	
018	Franklin Arterial at Marginal Way	Remote/Daily	In Service	
019	Fox Street at Anderson	Remote/Daily	In Service	
Capisic Brook	042	Warren Avenue 60"	Remote/Daily	In Service
	043	Warren Avenue 24"	Remote/Daily	In Service
Casco Bay	004	Tukeys Bridge Siphon	Remote/Daily	In Service
	020	Northeast Pump Station	Remote/Daily	In Service
Fore River	029	West Commercial Street	Remote/Daily	In Service
	030	St. John Street	Remote/Daily	In Service
	032	Thompsons Point Pump Station	Remote/Daily	In Service
	033	Fore River Pump Station	Remote/Daily	In Service
	034	Brewer Street	Visual/As needed	Block Data
	036	Capisic Pond Dam	Closed	Removed
	039	Rowe Street (Hillcrest)	Remote/Daily	In Service
Portland Harbor	023	India Street	Remote/Daily	In Service
	024A	Franklin Arterial at Fore Street	Remote/Daily	In Service
	024B	Franklin Arterial at Middle Street	Remote/Daily	In Service
	025	Long Wharf	Remote/Daily	In Service
	026	Maple Street at Commercial Street	Remote/Daily	In Service
	027	Clark Street	Remote/Daily	In Service
	028	Emery Street	Remote/Daily	In Service
Presumpscot Estuary	002	Arcadia Street	Visual/As needed	Block Data

from Dennis Welch - PWD - 1-28-11