

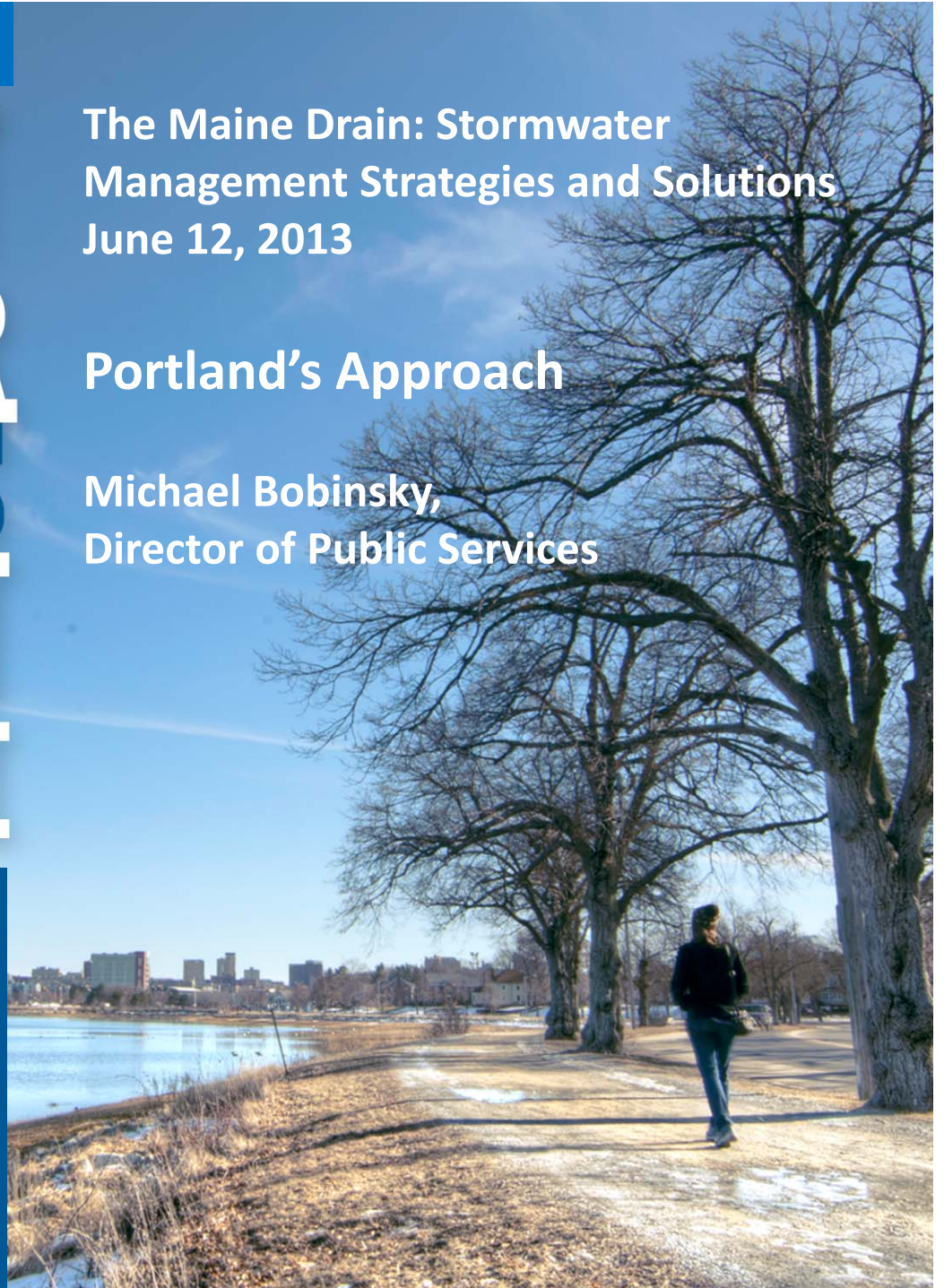
CLEAN WATER equals CLEAN GROWTH



The Maine Drain: Stormwater
Management Strategies and Solutions
June 12, 2013

Portland's Approach

Michael Bobinsky,
Director of Public Services



Clean Water – Clean Growth

“You can’t build a vibrant economy on crumbling infrastructure”

**ECONOMIC
DEVELOPMENT
VISION + PLAN
PORTLAND MAINE**
August, 2011

**DRAFT
REPORT**

Combined Sewer Overflow
Long Term Control Plan
Tier III Update



City of Portland, Maine
and Portland Water District
July 2011

CDM
WRIGHT-PERCE
Engineering & Water Environment

Marginal Way
October 2011

Munjoy Street Sewer
Collapse February 2012

Portland's Wastewater System



Wastewater Facts

94 miles of sewage pipe



141 miles of stormwater pipe

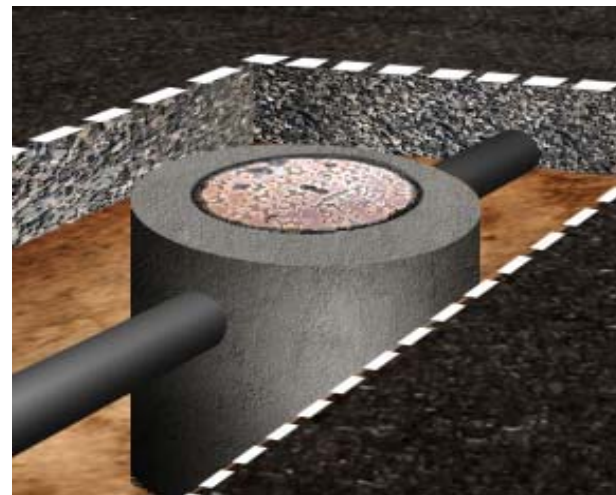


119 miles of combined pipe



Nearly 15,000 additional structures move sewage and stormwater through the system.

- Portland's wastewater system dates back to 1870
- East End Treatment Plant online in 1979
- In 1983 City establishes dedicated Sewer Fee
- During wet weather, raw sewage can overflow into Casco Bay making swimmers sick and contaminate seafood.
- Stormwater runoff is polluted, but there is no major active treatment system for stormwater.



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Our Obligations

Clean Water Act

- National Pollutant Discharge Elimination System (NPDES).
 - EPA Combined Sewer Overflow Control Policy (CSO)
 - EPA Sanitary Sewer Collection System and Dry Weather Overflow Policy
- Maine Pollution Discharge Elimination System (MEPDES)
 - Municipal Separated Storm Sewer Systems (MS4)
 - Residual Designation Authority (Long Creek)

Maine Law

- Maine DEP, Chapter 570, Combined Sewer Overflow Abatement rules
- Combined Sewer Overflow Long Term Control Plan
- Urban Impaired Streams (4 in Portland)
- Provision for waiver where local program addresses stormwater

Challenges Overcome



- 1991 – City of Portland and Portland Water District enter into Consent agreement with Maine DEP to address overflows
- Since then over 100 projects completed
- 11 of 43 overflows completely eliminated
- Since 1993, reduced overflow volumes by 42%
- Separated over 20 miles of pipe.
- Cost \$70 Million

The Next Challenge

The City Council formed a Task Force to figure out:

- How to PAY FOR \$170,000,000 CSO investments over next fifteen years and an expected tripling of the sewer rate during that time.
- How to PAY FOR maintaining the stormwater and combined systems
- Possible funding sources included
 - Sewer fees
 - Property taxes; or a
 - Modified sewer rate structure
- The Task Force considered

Fairness and Equity.

Portland City Council Business Representative/Property Manager

- East Brown Cow Property Management
- JB Brown and Sons
- Lathrop Property Management

Neighborhood Association

- West End Association

Tax-exempt Property Owner

- Mercy Hospital
- University of Southern Maine

Advocacy Representative

- Casco Bay Estuary Partnership
- Casco Baykeeper

Portland Water District

- General Manager or designee

Industrial Wastewater Discharge Permit Holder

- Oakhurst Dairy

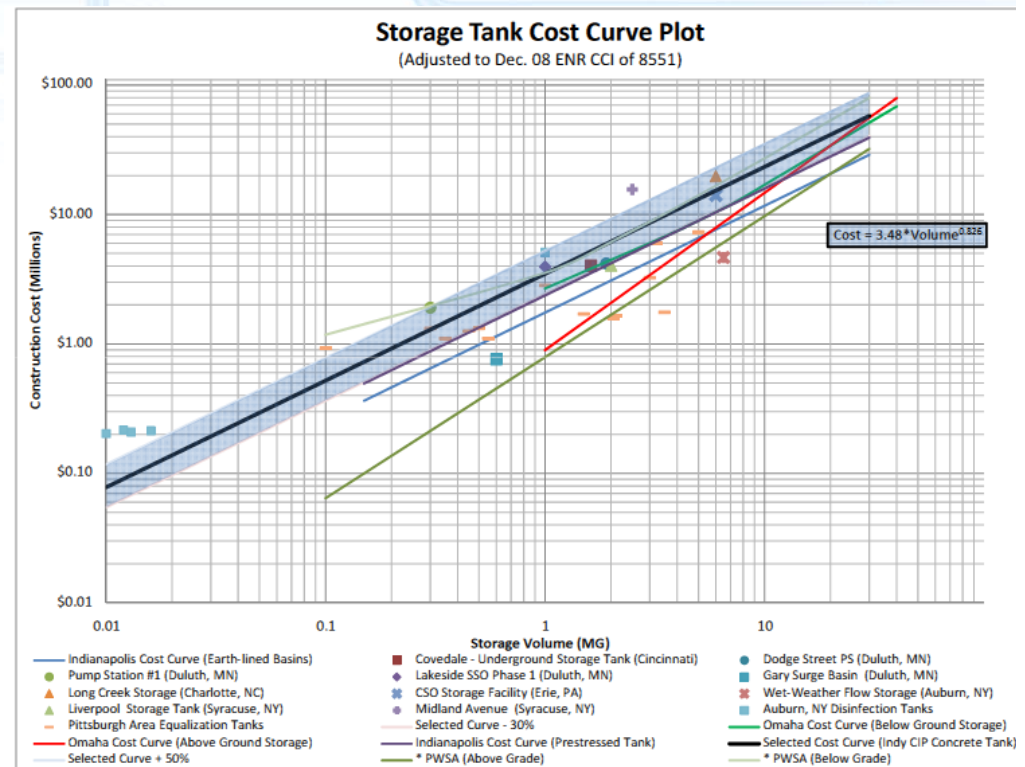
Where Will Investments be Made?

- 15 Million Gallons of storage to reduce combined sewer overflows
- Upgrades at wastewater treatment plant to improve performance
- New storm and sewage collection lines to reduce back-ups
- Stormwater system improvements



Why These Investments ?

- Priority Separation/Storage Alternative Exceeds Objectives for Less Cost
- Tier III study estimated \$525M for conventional sewer separation VS. \$170M for integrated approach
- Enhances Pollution Control VS. Separation



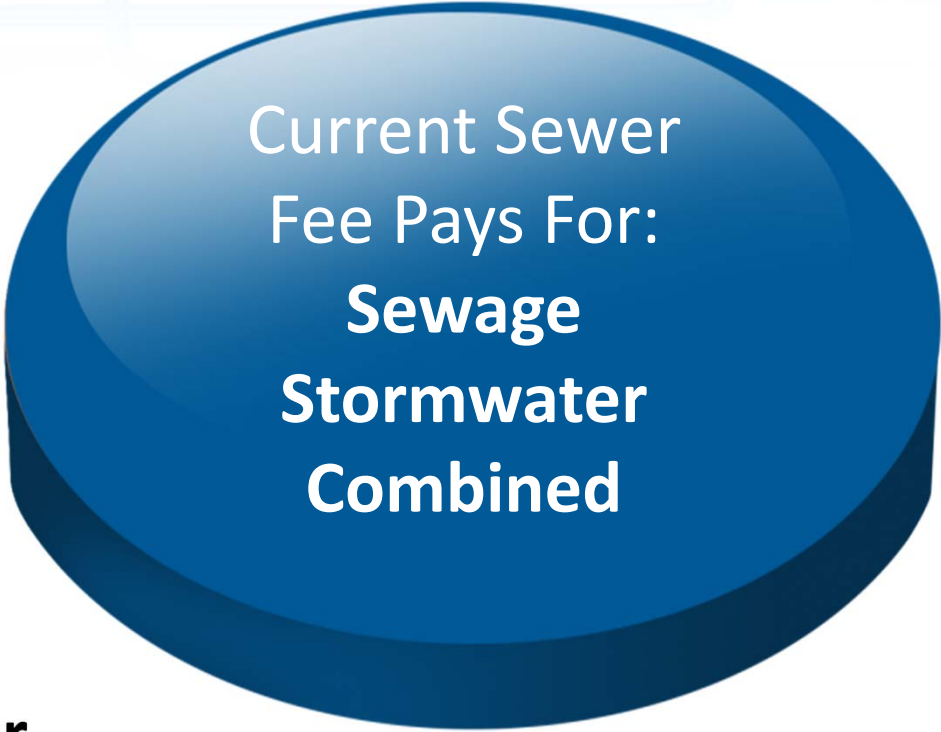
* Source: PWSA Basis of Cost for CSO Control Technologies , March 2007

How Do We Pay Now?

Currently, the sewer fee is the ONLY way to pay for wastewater system improvements.

The sewer fee is set based on sewer discharged into the system.

Only properties who pay for water pay a sewer bill.



**Current Sewer
Fee Pays For:
Sewage
Stormwater
Combined**

CURRENT SYSTEM

Apartment

Sewage = 6MGY

~~Runoff = 3MGY~~

Sewer Fee = \$385

Industry

Sewage = 20MGY

~~Runoff = 10MGY~~

Sewer Fee = \$2,768

House

Sewage = 0.07 MGY

~~Runoff = 0.04 MGY~~

Sewer Fee = \$41

Government

Sewage = 0.1 MGY

~~Runoff = 1 MGY~~

Sewer Fee = \$761

Parking Lot

Sewage = 0.0 MGY

~~Runoff = 3 MGY~~

Sewer Fee = \$0

Combined
(Stormwater
& Sewage)

Stormwater

Stormwater
Outfall

Combined
Sewer

Sewage

Notes:

- Fee in Dollars per Month
- MGY = Millions of Gallons Per Year

Treated
Sewage

Task Force Recommendation

Split the current fee into two parts.

**Sewer fee pays for
sewage system and half
of combined system costs.**

**Stormwater fee pays for
storm sewer and half of
combined system costs.**



RECOMMENDATION

Apartment

Sewer Fee = \$261
Stormwater Fee = \$48
versus
Sewer Fee Only = \$385

House

Sewer Fee=\$28
Stormwater Fee=\$13
versus
Sewer Fee Only = \$41

Government

Sewer Fee=\$518
Stormwater Fee=\$341
versus
Sewer Fee Only=\$761

Industry

Sewer Fee =\$1,883
Stormwater Fee=\$438
versus
Sewer Fee Only=\$2,768

Parking Lot

Sewer Fee=\$0
Stormwater Fee=\$55
versus
Sewer Fee Only=\$0

Stormwater

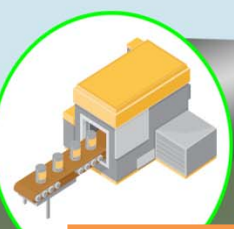
Combined
(Stormwater
& Sewage)

Sewage

Treated
Sewage

Note:

- Fees in Dollars per Month
- Future fees are for example properties and will vary by impervious cover and sewer use.



Credits



Property Owners can lower their stormwater fee if they make site improvements that **reduce stormwater impacts** from their property.

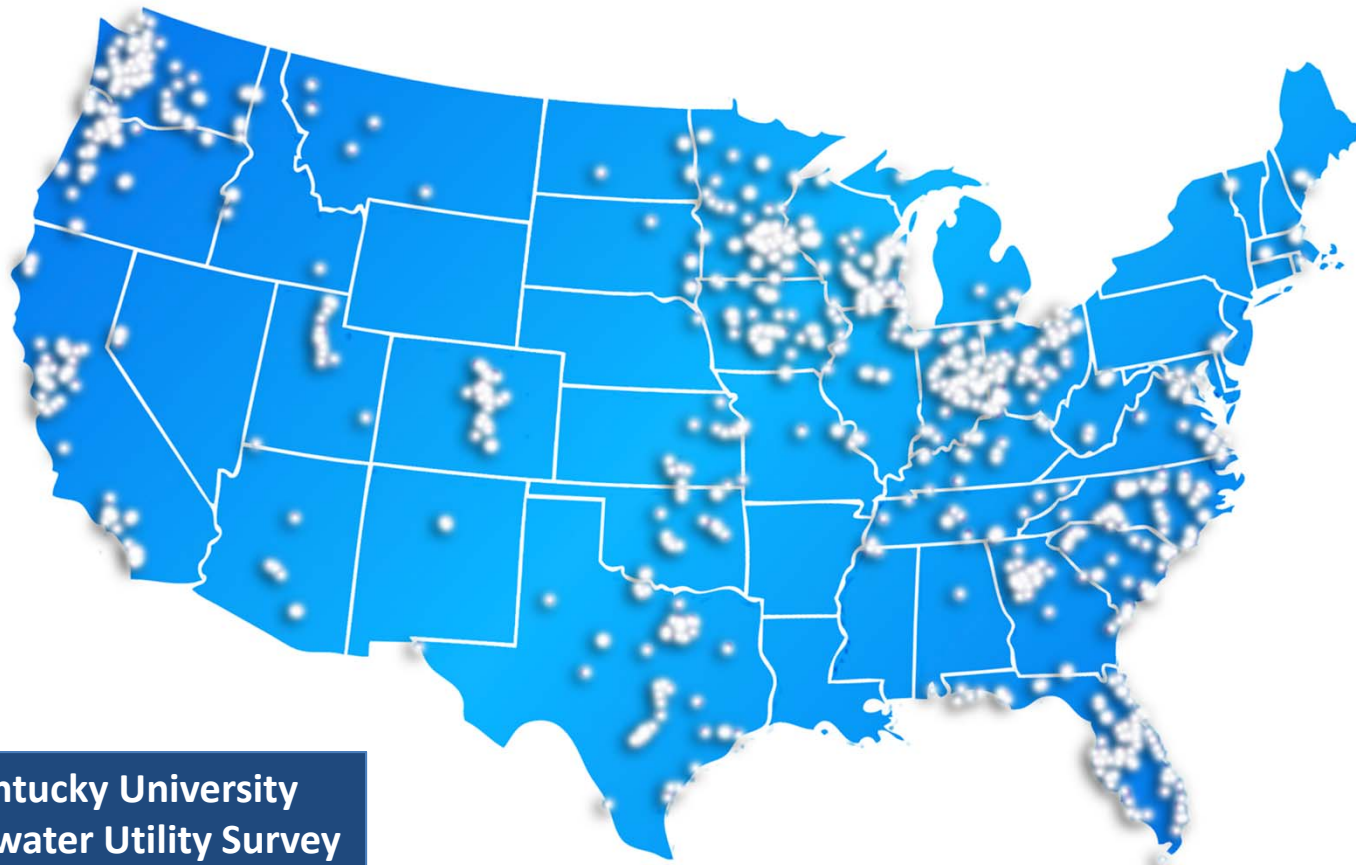


Raingarden-Dead River Properties

Is This Uncommon?

This is NOT a novel concept.

Over 1000 municipal entities are already doing this.



Western Kentucky University
2010 Stormwater Utility Survey

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How It Works?



- All revenue is dedicated; called an Enterprise Fund.
- Dedicated funds for sewer and stormwater improvements, maintenance and operations; mandated by local law.
- Doesn't compete with Police, Fire, Schools and other Public Services.

Next Steps

- Finance Subcommittee Considers Modified Rates
- Sewer Ordinance Revised
- City Identifies Operational Efficiencies
- City Considers Reprioritization of ALL Clean Water Act Requirements to Reduce Overall Spending and Maximize Clean Water Benefit (Integrated Planning)
- Public Outreach

Visit [www.portlandmaine.gov/
sustainablestormwaterfunding.htm](http://www.portlandmaine.gov/sustainablestormwaterfunding.htm)



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