

St.Germain • Collins



MEREDA's Morning Menu

**Sustainable Stormwater Development =
Sustainable Growth: Perspectives on
Stormwater Service Fee Programs and Credits**

November 10, 2016

Panelists

Scott Collins, P.E. – *Managing Principal and Senior Engineer at St. Germain Collins*

Douglas A. Roncarati, Jr. – *Stormwater Program Coordinator at City of Portland, Maine*

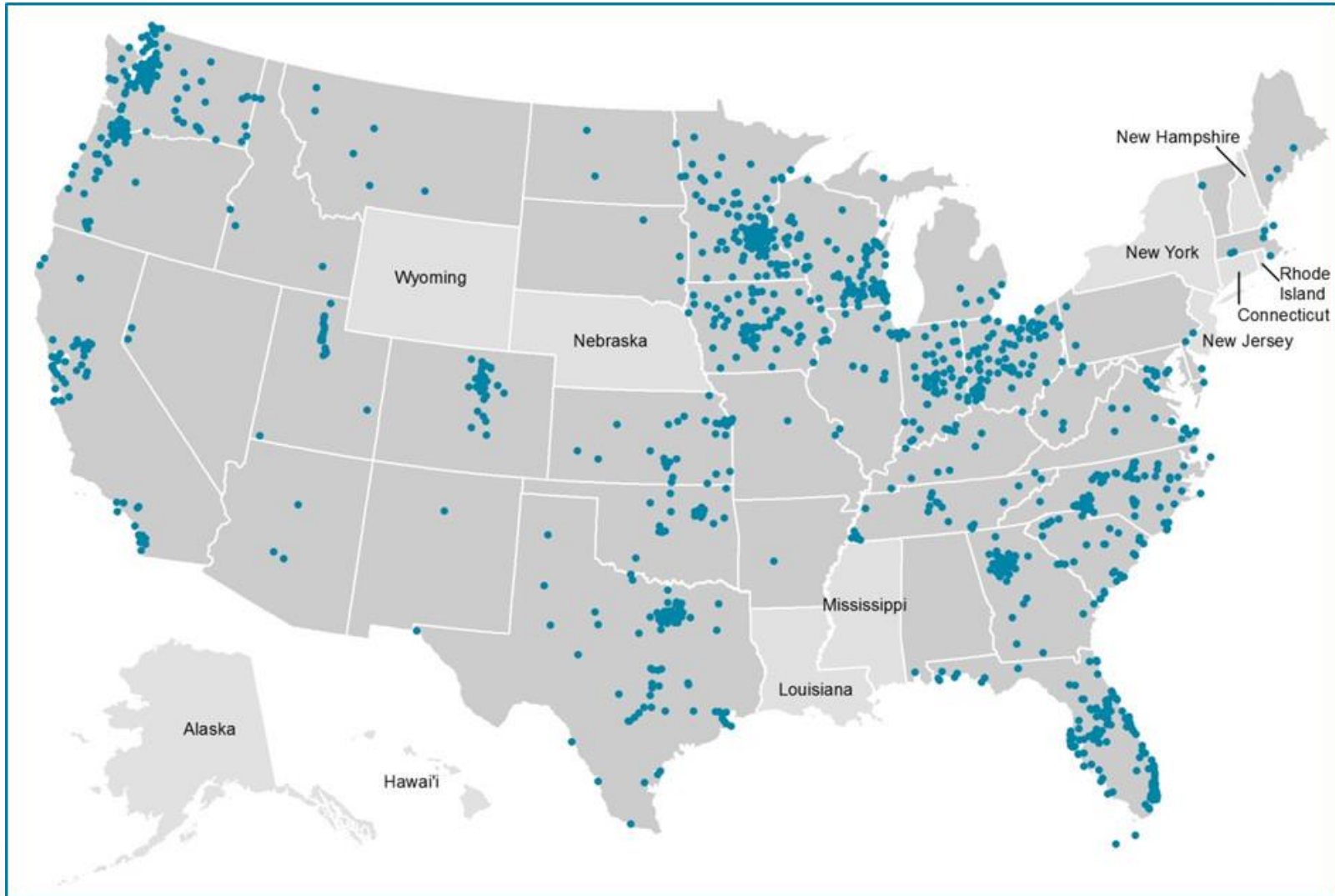
Justin Pellerin, P.E. – *Stormwater Project Engineer at City of Portland, Maine*

Brian DesMarais – *Area Environmental Protection Manager at Waste Management*

Questions to Be Answered Today

1. What is a Stormwater Service Fee?
2. What municipalities in Maine and elsewhere have introduced Stormwater Service Fees?
3. How does the City of Portland's Stormwater Service Fee system work?
4. What is a stormwater Service Fee Credit Program?
5. How is the City of Portland spending my Stormwater Service Fee?
6. How can I earn credits off my monthly fee?

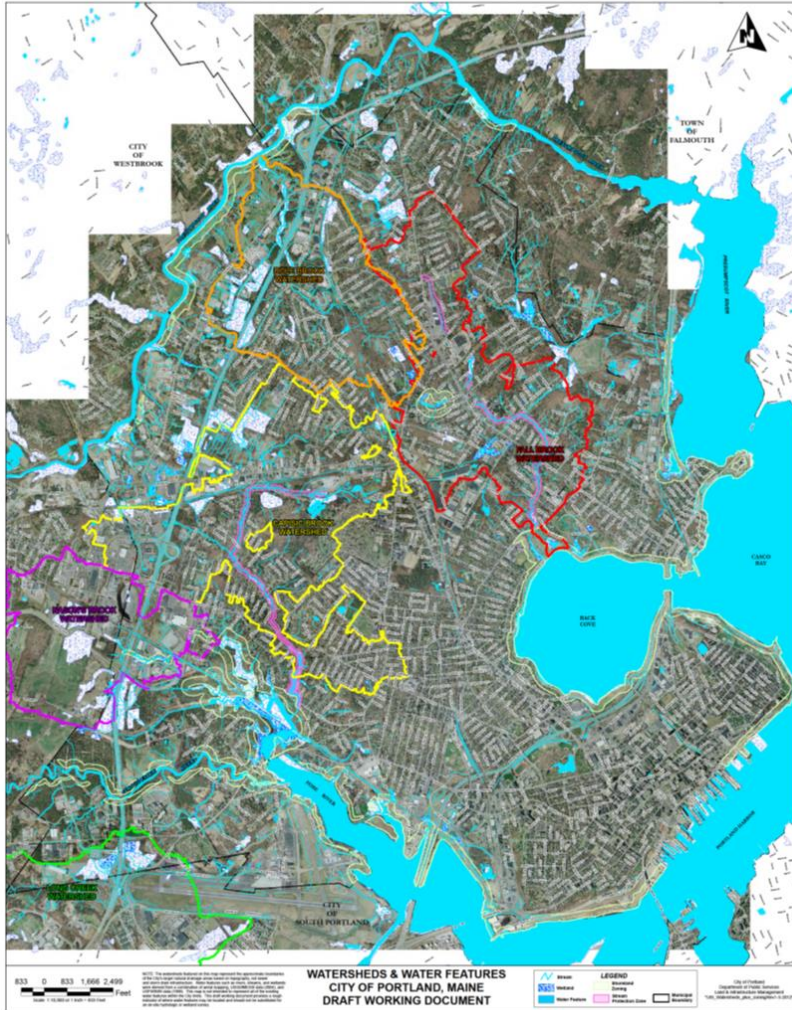
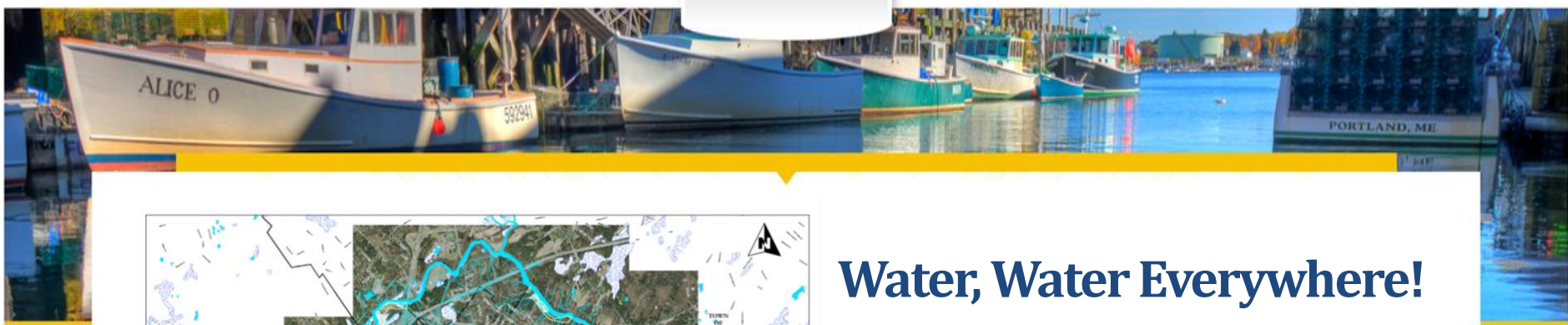
Stormwater Utilities Programs in Place



Source: *Western Kentucky University Stormwater Utility Survey 2013*,
C. Warren Campbell, Western Kentucky University, Bowling Green, KY.

Stormwater Utilities Programs

- Bangor, Maine (May, 2012)
 - \$22 per year for the first 3,000 feet of impervious cover.
 - \$11 for each 1,000 feet of impervious cover over that.
 - Credit available for properties with 4,000+ feet of impervious **and** extra steps are taken to mitigate stormwater.
- Lewiston, Maine (2006-2007)
 - Commercial properties: base rate of \$50 per year for up to 2,900 square feet (SF) of impervious surface.
 - Plus additional \$0.054 for every square foot of impervious surface exceeding 2,900 SF.
 - Two credit programs available: City Stormwater System Impact Credit, and a Permit Improvements Credit.
- Northampton, MA
- Chicopee, MA
- Newton, MA
- Reading, MA
- Fall River, MA
- South Burlington, VT



Water, Water Everywhere!

- Fore River
- Presumpscot River
- Stroudwater River

- Capisic Brook
- Dole Brook
- Fall Brook
- Long Creek
- Nason's Brook
- Smith's Creek

- Capisic Pond
- Deering Oaks Pond

- Back Cove
- Portland Harbor
- Casco Bay

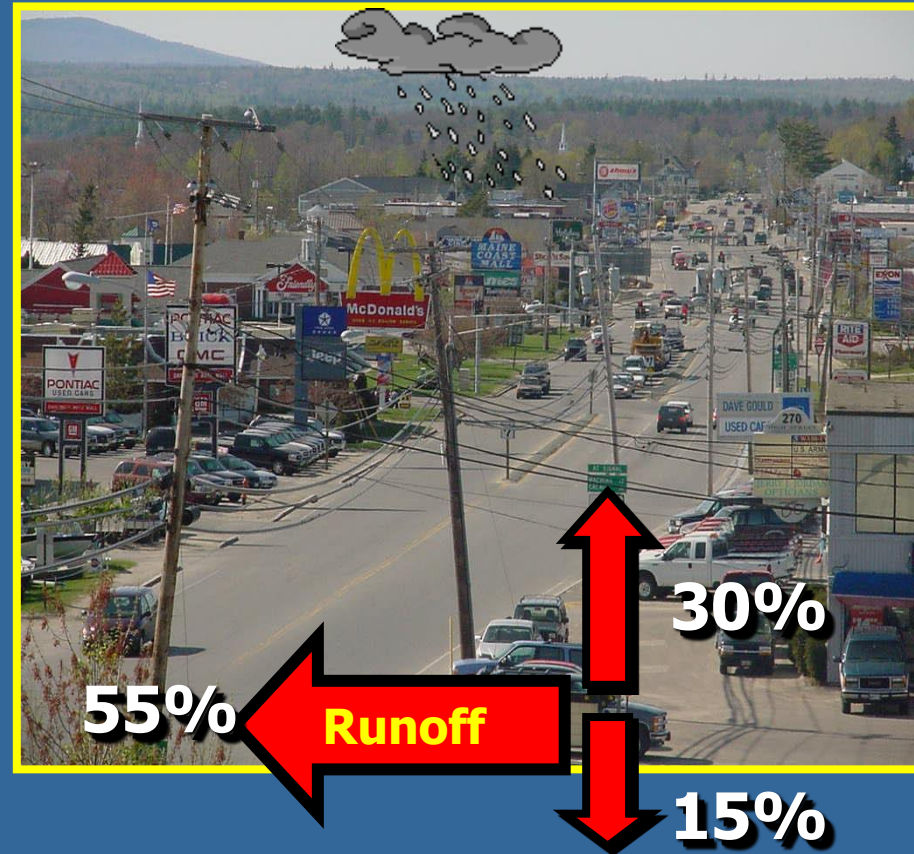
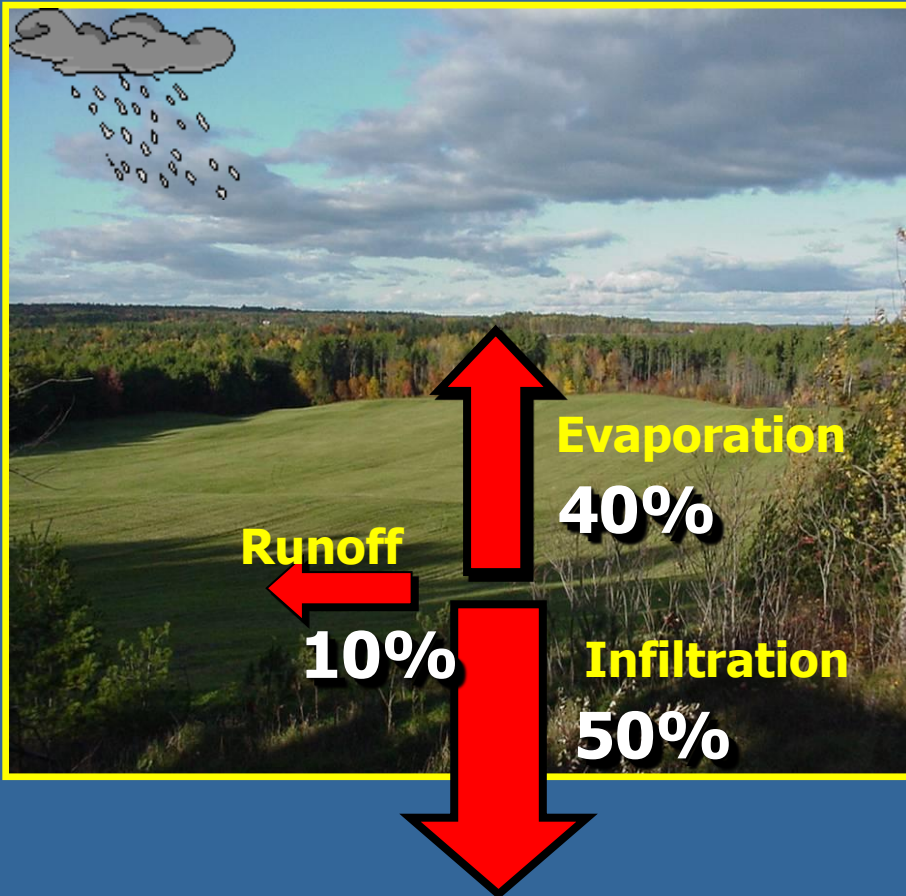


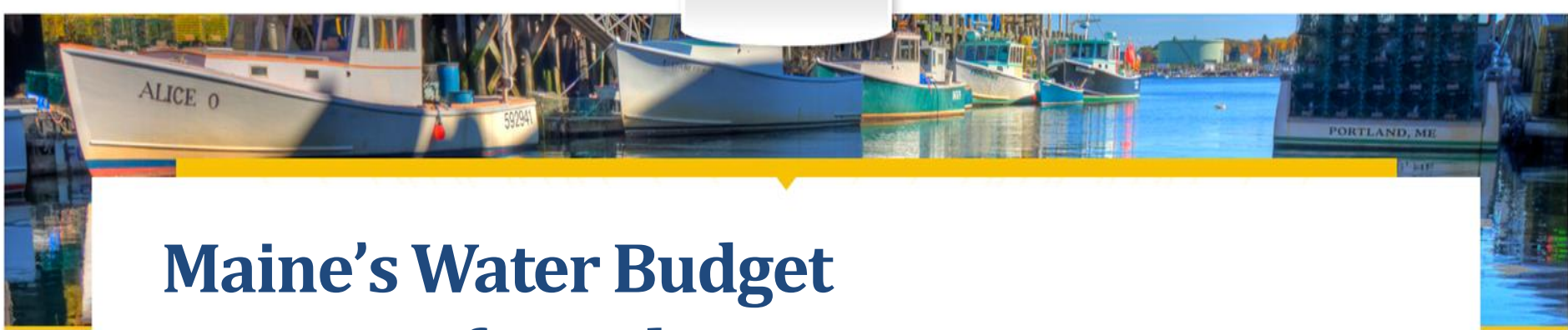


Maine's Water Budget Impacts of Development

Natural Cover

75-100% Impervious Surface





Maine's Water Budget Impacts of Development



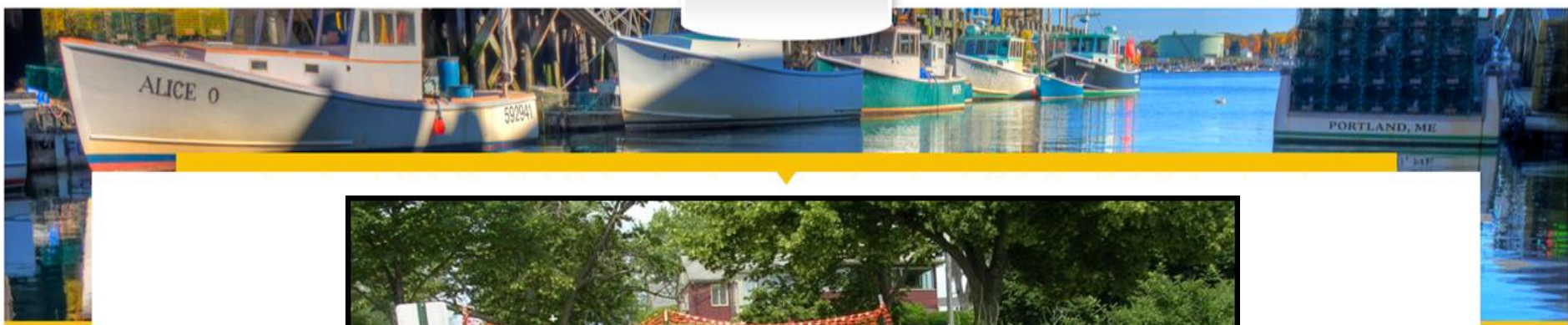
*The Solution to Pollution is
Dilution . . . Sort of . . .*



Portland, Dartmouth Street Combined Sewer, 1918



East End Treatment Plant – est. 1979



*CSO 10, Mackworth Street
Discharge to Back Cove
Replaced in 2009*



Development Impacts on Water Quality



Bacteria
Sediments
Temperature
Nutrients
Petroleum Derivatives
Pesticides and Herbicides
Heavy Metals

Increased quantity
Decreased quality



**CLEAN
WATER
equals
CLEAN
GROWTH**





Stormwater Credit System

- Credits Awarded for Water Quality and Quantity Systems
- Systems that meet Portland Stormwater Regulations
- Possible to achieve 100 % credit
- Apply to Water Resources Division of Public Works
- Stormwater Credit Manual



**CLEAN
WATER
equals
CLEAN
GROWTH**



Stormwater Credit Manual

Stormwater Service Charge

City of Portland, Maine

Version 1.1
Last Updated: August 2015

www.portlandmaine.gov/stormwater



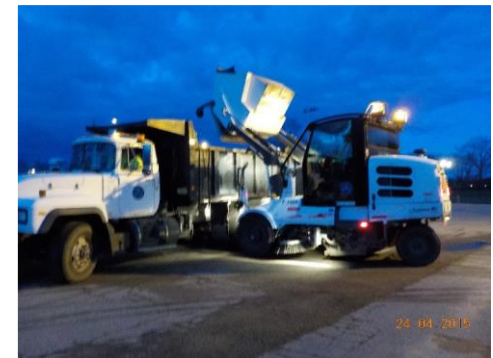
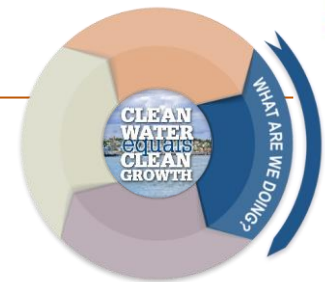
Stormwater Credit System

- Stormwater Service Charge has been active since Jan 1, 2016
- 23 Approved Non-Residential Credit Systems
- Largest Credit: Pre Credit: \$582/month. Post Credit: \$242/month
- Range of % reductions: 60%-10%
- Average Monthly Reduction: 30%



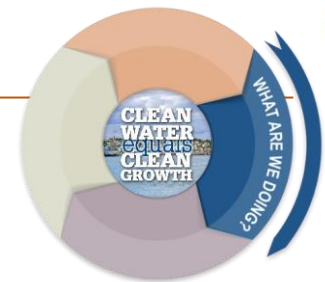
How Stormwater Funds Are Spent

- Catch Basin Cleaning – Minimum of 3,000 per year (6,000)
- Green Infrastructure Inspections & Maintenance
- Street Sweeping – 260+/- Miles City-wide – 1500-1600 actual



How Stormwater Funds Are Spent

- City owned Green Infrastructure Projects
- G.I. Maintenance Program
- Stormwater Infrastructure Repairs



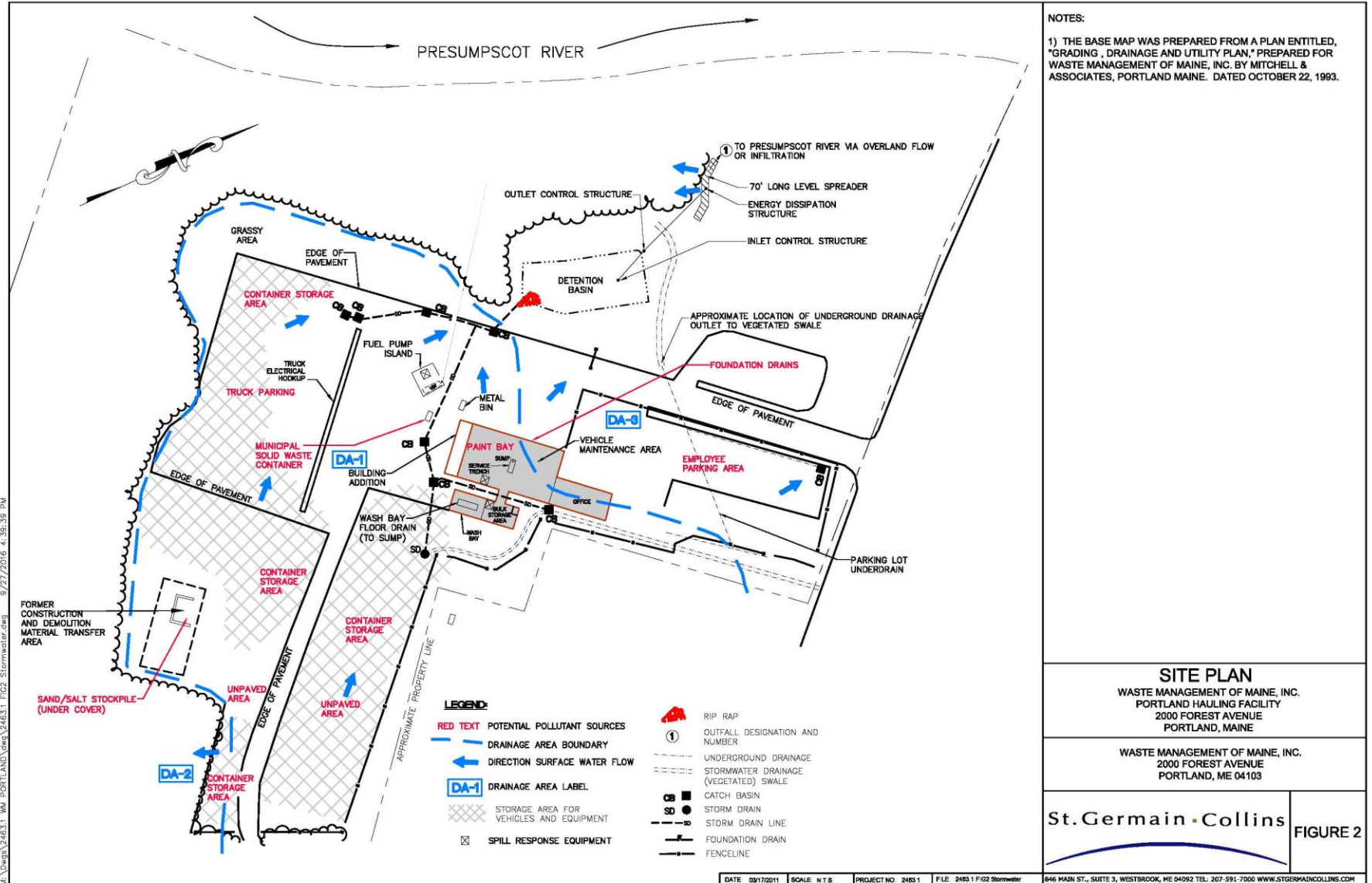
Property Owner Perspective

WASTE MANAGEMENT OF MAINE 2000 & 2012 Forest Avenue, Portland

- Received 2016 City of Portland Stormwater Bill
- Building Impervious Area = 15,531 sf
- Surface Impervious Area = 205,745 sf
- Total Impervious Area = 221,276 sf
 - Monthly Charge = \$1,104.00
 - Annual Charge = \$13,248.00

Waste Management

2000 & 2012 Forest Avenue, Portland



Waste Management – First Steps

- Perform standard annual maintenance on stormwater systems
- Confirm impervious areas reported
- Hire St.Germain Collins to determine existing credits
 - Perform inspection of existing systems – City Form 4
 - Compute Basic Water Quantity Credit (Waiver)
 - Compute Minimum Water Quality Credit (Wet Pond)
 - Determine new Total Billable Impervious Area
 - Submit Non-Residential Stormwater Credit Application – City Form 3

Waste Management – Results

- Receive Condition of Approval for Existing Credits
 - 25% for Minimum Water Quality Credit
 - 10% Basic Water Quantity Waiver Credit
 - Monthly Charge reduced from \$1,104 to \$894 (savings = \$2,520 / year)
 - An approximate 20% reduction
- Credits are retroactive back to January 1, 2016
- Requires continued maintenance of stormwater infrastructure & submittal of BMP Inspection Form (City Form 4) each year

Waste Management – Next Steps

- Earn Additional Stormwater Service Fee Credits
- Basic & Extra Water Quality and Quantity Management Credits
 - Basic Credits - Meet current Chapter 500 Flooding and General Standards
 - Extra Credits - Exceed current Chapter 500 Flooding and General Standards
- Develop Conceptual Plan for Enhanced Stormwater BMP's
 - Convert an approximately 12,000 sf gravel area to pervious lawn
 - Provide Bio-Retention Cells at the employee parking area and at the trail head parking lot
 - Enhance/Retrofit existing stormwater detention basin to a wetpond that meets and possible exceeds current Chapter 500 standards

Maintenance and Inspection

- Structural controls are only effective if maintained
- Annual inspection
- Qualified 3rd party inspector
- City Form 4
- June 30th
- Right to Inspect

St.Germain • Collins



Questions?