

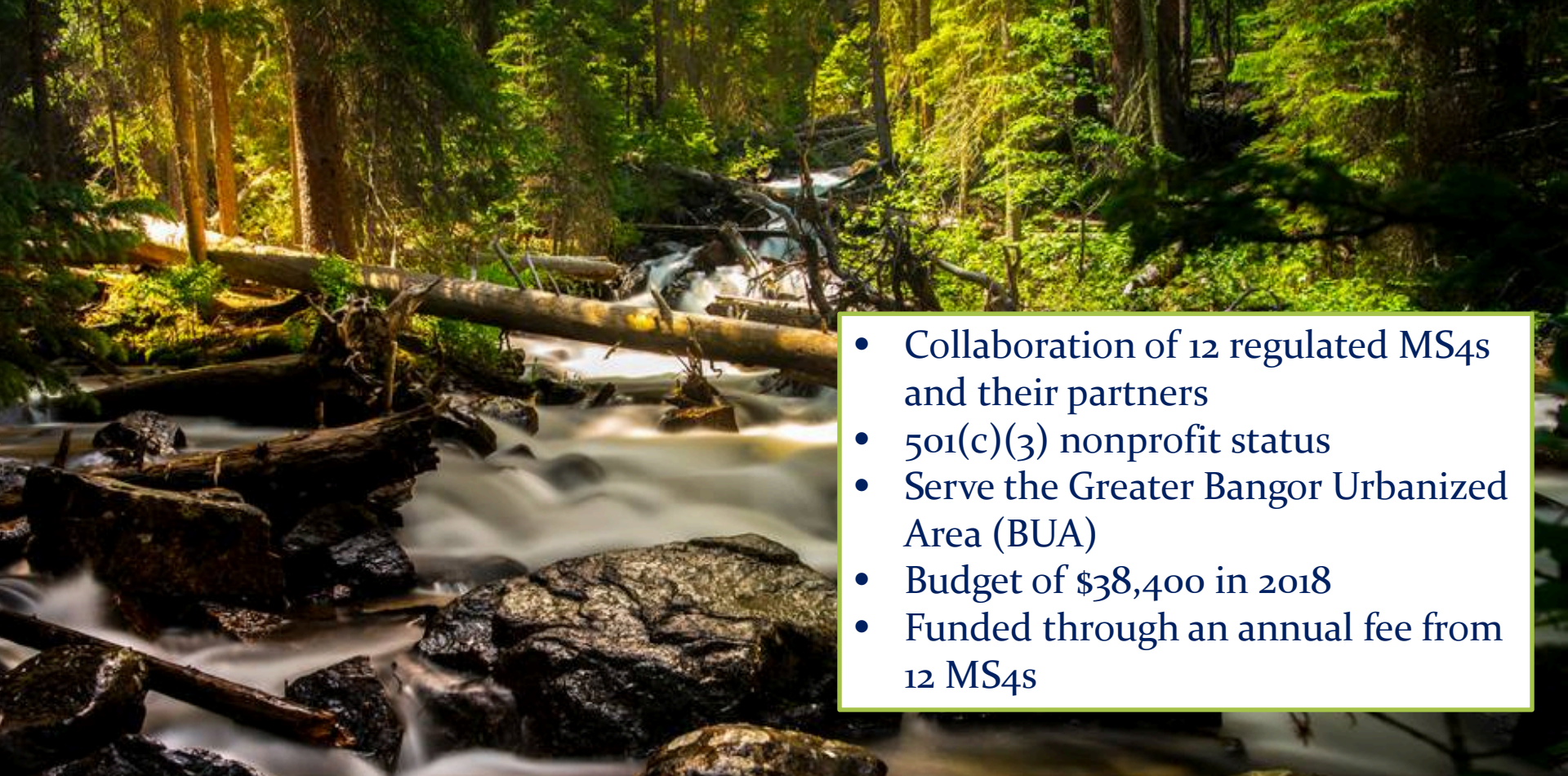


2018 Year-in-Review

Presented at the BASWG Annual Meeting

February 14, 2019

Old Town City Hall – Council Chambers

- 
- Collaboration of 12 regulated MS4s and their partners
 - 501(c)(3) nonprofit status
 - Serve the Greater Bangor Urbanized Area (BUA)
 - Budget of \$38,400 in 2018
 - Funded through an annual fee from 12 MS4s



BANGOR AREA STORMWATER GROUP

STORMWATER MANAGEMENT PERMITS

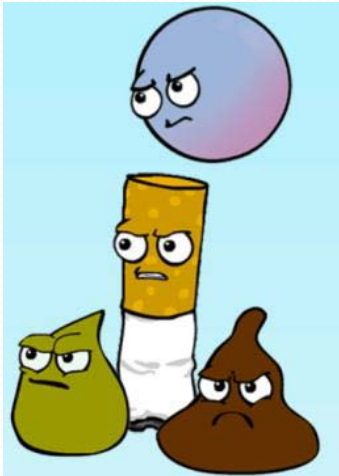
What Does the BASWG do?

- ☑ Assist MS4s with MS4 permit regulatory compliance
- ☑ Focus on E&O, but assist with other MCMs
- ☑ Able to discuss emerging issues, brainstorm, troubleshoot
- ☑ Allow all MS4s to meet together with DEP staff
- ☑ Provide a stronger voice
- ☑ Enables economies of scale
- ☑ Secure external grant funding for “above and beyond” efforts

Minimum Control Measures (MCMs):

1. **Public outreach and education**
2. **Public involvement**
3. Illicit Discharge Detection and Elimination
4. Construction
5. Post-Construction
6. Good Housekeeping and Pollution Prevention

Continuation and Enhancement of E&O Successes



BASWG
BANGOR AREA STORMWATER GROUP

2018 Year-in-Review

MCM 1: Education & Outreach

Regional Public Events

- ✓ Stream Clean-ups (Spring 2018)
 - ✓ 260+ volunteers
 - ✓ Hundreds of bags of trash

Popular “Anytime Stream Clean-ups” Continue to Put Model Created by Grant into Action



2018 Year-in-Review

MCM 1: Education & Outreach Regional Public Events

- ✓ Science Festival
- ✓ Children's Water Festival
- ✓ Municipal events

New Interactive Activity



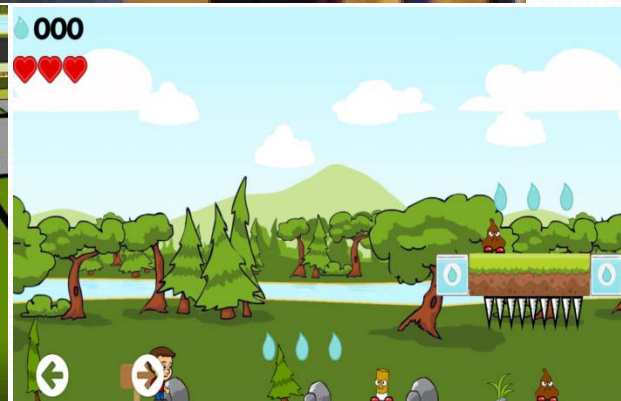
Children's Water Festival



Maine Science Festival

March 15 - 17

Utilizing BASWG's New Tools of Engagement



2018 Year-in-Review

MCM 1: Education & Outreach

Regional Public Outreach

☒ Children's Museum



2018 Year-in-Review

MCM 1: Education & Outreach Regional Public Outreach

☑ Bus Wrap (April 2018-Present)

- Serves service area population of 83,000
- Ridership of 95,000 individuals annually
- Majority of the population in the target audience demographic
- Citizens from all seven municipalities are exposed to the back of the bus every day along its service routes.





Bangor Area Storm
Water Group -
BASWG

@bangorareastormwatergr
oup

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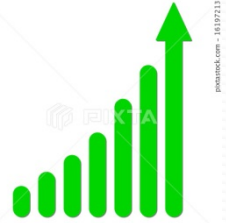
Videos

Promos

Posts

A Year of Electronic Media Gains

February 1, 2018 - January 31, 2019



BASWG social media pages saw **growth of 126 total followers**, distributed as follows:

- **Facebook:** 579 -> 620 (7.1% increase)
- **Twitter:** 142 -> 163 (**14.8% increase**)
- **Instagram:** 133 -> 197 (**48.1% increase**)

The BASWG Facebook and Twitter accounts had 169 posts each, and the Instagram account had 44 posts.

Total reach was approximately **155,500 impressions** over the course of the year (likely underestimated), with **2,298 engagements** across the three platforms.

Though the Facebook account has historically been BASWG's primary social account, Twitter and Instagram have seen a high amount of growth over the year in both follower count and number of impressions.

While Facebook's audience is mostly local, Twitter is national, with many of the highest-impression posts being shared by stormwater organizations around the country.

What Do they Like?



The most successful posts for the year were typically related to

- Local events
- Stormwater-related news articles
- Stormwater tips

Some topics which were popular throughout the year were:

- The Maine Science Festival (2018)
- Community volunteering photos taken throughout the summer from municipal cleanup projects
- Storm drain stenciling art
- Stormwater behavior change survey, which included mulch as a randomly selected prize

What would they like to see that BASWG is not currently posting?

New Winter Initiative



[About BASWG](#) [Learn About Stormwater](#) [Resources](#) [Yardscaping & Lawn Care](#) [Snow/Ice ▾](#) [Events](#) [Minutes & Agendas](#) [Contact](#) [Stomp Out Pollution](#)



Stormwater and Salt: a Difficult Balance



Did you know that the salts used on our roads and driveways can have harmful effects on Maine's lakes and rivers?

Although using salt and other chlorides is necessary for public safety, there's an environmental cost associated as well. Stormwater runoff from storms and melting snow can carry chlorides and other pollutants from the ground right into our storm drains and ultimately streams, lakes, and rivers. The water that enters storm drains is rarely treated before it enters nearby water bodies!

When exposed to chlorides, water bodies can become uninhabitable for fish and dangerous for nearby wildlife that depends on the water to live. Unfortunately, more and more streams and rivers are becoming contaminated each year! Fortunately, you can help. Here are some tips to reduce your chloride use this winter.

Shovel first, then salt.

Shoveling before you salt can reduce the amount of salt you need to use. Save your salt to break up ice rather than using it on snow that you can remove without any help.

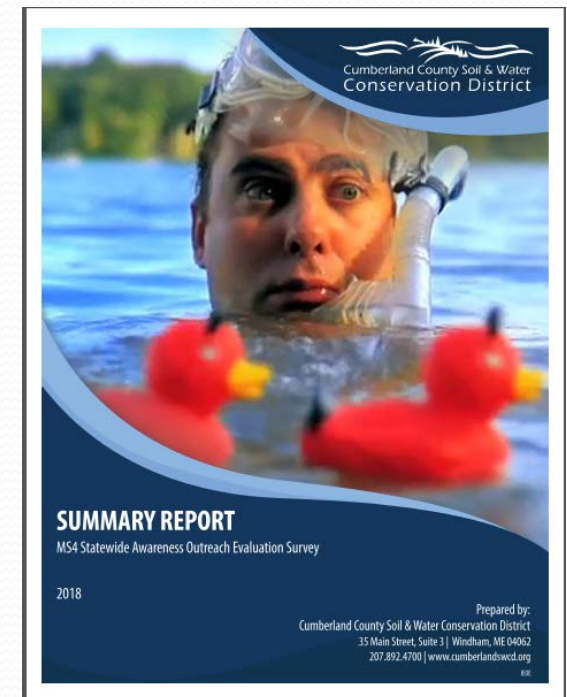
2018 Year-in-Review

MCM 1: Education and Outreach Completion of Statewide Outreach Plan

- ☑ Completion of Statewide Outreach Plan
- ☑ Outreach Plan *Evaluation*

Impact indicators (PY5)

- Statewide survey results
- Regional survey results



2018 Year-in-Review

MCM 2: Public Involvement

Behavior Change

More than 400
catch basins
stenciled

More than 50
citizen volunteers



- ☑ Completed required storm drain stenciling
 - ☑ Stenciling (7 communities+)
 - ☑ Use of newly designed stencils (Sage Foundation Project)



Ended 2013-2018 Permit Cycle Submitted SWMP 5-year Report



FIVE YEAR SUMMARY REPORT ON THE
REGIONAL MUNICIPAL STORM SEWER SYSTEM (MS4)
STORMWATER MANAGEMENT PLAN
FOR THE BANGOR AREA STORM WATER GROUP

FOR THE PERIOD
JULY 1, 2013-JUNE 30, 2018
TO COMPLY WITH 38 M.R.S.A. §413

SUBMITTED
September 14, 2018

TO
THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY THE MEMBERS OF THE BASWG
City of Bangor
City of Brewer
Town of Hampden
Town of Milford
Town of Orono
City of Old Town
Town of Veazie
Dorothea Dix Psychiatric Center
Eastern Maine Community College
Maine Air National Guard
University of Maine
University of Maine Augusta Bangor Campus

BASWG 5-Year Permit Cycle Report, 2013-2018 Page 1

Five-Year Permit Compliance Summary Table

MCM 1: Education and Outreach	Compliance Status (* = BASWG work in this area exceeded plan requirements)
BMP1A. Raise Awareness of Public Implementation of the Statewide Stormwater Awareness Plan as Approved by DEP Implementation of regional and local outreach efforts	COMPLETED COMPLETED*
BMP1B. Raise Awareness of Municipal Officials and State or Federally-owned Facility Managers Implementation of outreach to officials about Stormwater Permit Requirements and needs (Regional planning in PY1; Individual MS4 Implementation in PY1-5)	COMPLETED
BMP1C. Targeted BMP Adoption Implementation of Lawncare Behavior Change Plan Implementation of Supplemental Electronic Media Plan	COMPLETED* COMPLETED*
BMP1D. Address Stormwater Pollution Issue of Regional/Statewide Significance Regional support provided to MS4s required to submit chloride outreach plans	COMPLETED*
MCM 2: Public Involvement	
BMP2A. Public Notice requirements	COMPLETED
BMP2B. Public Events	COMPLETED*
MCM 3: Illicit Discharge Detection and Elimination	
BMP 3A. Hazardous Household Waste Collection Events CHANGE APPROVED BY DEP IN PY3 to supporting planning for MS4 compliance with Household Hazardous Waste Day Event plans through planning and sharing about multi-MS4 events	COMPLETED
MCM 4: Construction	
No regional activities required in plan	COMPLETED ADDITIONAL NON-PLAN ACTIVITIES*
MCM 5: Post-Construction	
No regional activities required in plan	COMPLETED ADDITIONAL NON-PLAN ACTIVITIES**
MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations	
BMP 6D. Municipal Training	COMPLETED*



Impact Analysis: Preferred Behaviors have Taken Root

- 83.61% of respondents reported that they do not currently use lawn chemicals, with another 3.28% who plan to stop using them in the near future (5 years or sooner).
- Only a combined 13.11% of respondents reported that they are currently using lawn chemicals and do not plan to stop.

Lawn chemical use has decreased during the permit cycle

- 18% increase in those who chose not to use any **lawncare chemicals** on their lawn (60% in the past → 78% currently)
- 11% reduction in respondents reporting personally using lawncare chemicals (23% in past → 12% currently)
- This holds true for other family members as well, declining from 12% in the past → 5% currently (reducing this number by more than half).
- Those who used a paid service reduced from 14% → 9%.

Planning Input

While respondents were confident they should only use a moderate amount of or no lawn chemicals, they were...

- Unsure of when they should apply lawn chemicals to their lawn
- Potentially influenced by the neighbors
Roughly one half (50.27%) of respondents indicated that their neighbors' preferences towards lawn chemicals could influence their own behavior.
- Most people who have stopped using pesticides have done so due to general **concern about toxicity**, though a few responses mention environmental concern as well.

BASWG may need to share more information about **proper timing of application** for those who still use some products.

Insight into motivators

Additional Insights on Impact

- 36% of the surveyed population had heard of local efforts to reduce the use of lawn chemicals.
- **Half** of those who had heard of the local efforts reported taking action *as a result of these efforts*.
- Their actions in response to these local efforts included:
 - Cutting back on lawn chemicals
 - Using rain barrels
 - Reducing use of driveway salt
 - Washing cars on the lawn

In the future BASWG should work to better understand if this means they have not seen efforts or simply are not connecting what they have observed with these outreach efforts.

May give clues to what are the most likely actions to be taken (explore further)

2018 Year-in-Review

Other MCMs as appropriate

- ✓ Continued to share about audits, issues and innovations
- ✓ O&M Training with Penobscot Nation
- ✓ Shared learning



Reducing Chloride Pollution

(Required Additional Outreach Audience)

- ✓ Ongoing BMPs used at individual MS4 level
- ✓ Presentation on chlorides and group discussion
- ✓ New public outreach social media initiative
- ✓ Prepared to continue working with other clusters to develop:
 - 1. Voluntary Certification Program
 - 2. Liability Protections (bill)
 - Working on securing regional co-sponsors for bill





BASWG

BANGOR AREA STORMWATER GROUP

2018 Year-in-Review

Permit Renewal – Dialogue, Stakeholder Engagement and Formal Comment Letters

- ✓ Attended statewide stakeholder meetings
- ✓ Engaged DEP in ongoing regional discussion
- ✓ Jointly reviewed multiple draft permit documents
- ✓ Submitted comments on each draft

What's Next?

- Continuing implementation of the current permit
- DEP approved BASWG plans
- Reps are meeting with DEP this afternoon for update
- Expecting new draft soon – likely to be issues
- Expect another stakeholder engagement process
- BASWG will submit comments
- Begin implementation July 2020?
- Work on planning in the meantime
 - Decisions about E&O target audiences, whether to collaborate with other clusters and in what way, etc.
- Continue to focus on E&O