DRAFT Maine Winter Maintenance Roundtable Proceedings

September 10, 2015 from 9:00 am – 3:00 pm
Maple Hill Farm Inn and Conference Center in Hallowell, Maine
Compiled by Brenda Zollitsch
Last Updated: 10/6/15

Goals for the Roundtable:

- To share new best practices manual
- To train participants in the content of the manual
- To encourage voluntary adoption of winter maintenance best practices
- To better understand the interest in and barriers to adopting these best practices
- To determine interest in a revision of the manual to include contractors
- To determine interest in developing a voluntary certification program in Maine

Welcome

Peter Coughlan of Maine Local Roads (MLR) welcomed everyone to the Roundtable.

Overview of the Day

Robyn Saunders of the Cumberland County Soil and Water Conservation District (CCSWCD) welcomed participants and provided opening remarks.

BMP Manual Background

Review of Work to Date by Maine Snow and Ice Control Best Practice by Statewide Working Group Facilitator Brenda Zollitsch

This statewide effort to address the need to develop environmental best practices for snow and ice **control originated with the release of a study by the Margaret Chase Smith Center in 2010 entitled, "Maine Winter Roads: Salt, Safety, Environment and Cost."** A presentation was made to the Bangor Area Stormwater Group (BASWG) which detailed some long-term impacts of chlorides, but did not specifically identify actions that municipalities and others could take to address chloride pollution. To explore these issues, a statewide roundtable was held at Maple Hill Farm Inn and Conference Center in September 2010 to stimulate discussion on the chloride issue and share the results of the report. At this roundtable a list of questions was developed that participants felt needed to be answered in order to better understand the issue and determine next steps.

Over the coming years, a **statewide working group conducted research and hosted meetings** to answer these questions. The group held a series of meetings, video conferences and conference calls over the last several tears and supported research by the University of Maine on chloride best practices both within the state and across the U.S. The **result of this process was a bottom-up effort to document specific voluntary environmental best practices** that could be employed by municipal operations to reduce the quantity and impact of salt use by municipalities, as well as cumulatively across the state. Research by the University

of Maine for this group also identified the key importance of having Maine Local Roads as a leader in sharing this information and training municipal staff on identified best practices.

The final product of this statewide effort has been **the development of draft statewide manual of voluntary environmental BMPs for snow and ice control**. The manual has been reviewed and edited by a range of stakeholders, as well as Maine Local Roads. A final draft of the manual was circulated with the invitation to the roundtable in August 2015.

Brenda thanked the many participants who have contributed in some portion of the development of the BMPs and manual, pointing participants to the list of contributors on Page "i" of the manual. **More than 40 individual municipal, state, county, nonprofit, academic and consultant contributed to the development of this effort**. The primary focus in developing the manual was on BMPs crafted by on-the-ground staff.

Maine Local Roads plans to use the manual in a series of regional trainings over the next year. Additionally, several Municipal Separate Storm Sewer System **(MS4) communities are currently using the manual as the basis for BMPs in their MS4 Chloride Outreach Plans**. These communities currently include municipalities in the Greater Bangor Urbanized Area and the Lewiston-Auburn Area, as well as a number of non-traditional MS4s in the Bangor region.

To facilitate this process the BASWG developed a **BMP Matrix**, which was shared with Roundtable Participants in their handouts. This document lists each of the BMPs in the manual and allows users to document which BMPs they currently have in place, which they would like to employ in the short-, medium- and long-term, as well as which ones they do not expect to employ in the foreseeable future.

One of the most important concepts that the working group wants to convey is that **the manual focuses on *voluntary adoption* of BMPs**, rejecting a regulatory approach to requiring specific best practices. This is because snow and ice control is location/context-specific. There is no cookie-cutter approach that can work to regulate this work. A voluntary approach is key to the success of this effort.

The current **Volume 1.0 of the BMP Manual focuses on municipal practices**. The work group started with municipal operations because of liability issues and because most of the work group members were MS4s seeking to improve municipal snow and ice control operations**. Version 2.0 is planned to have an expanded focus that includes municipal and private contractors.**

The **manual has been designed to provide a starting point for decision makers**. The target audience for the manual is public works directors, city managers and other decision makers who are part of the process of determining municipal snow and ice operational decisions and budgets. The manual offers a menu of options for a specific best practice. **Once a decision is made by a municipality about which elements they want to adopt, a municipality can use the information in the manual to develop and format their local BMP**, something they employ in training efforts and can post in their facilities.

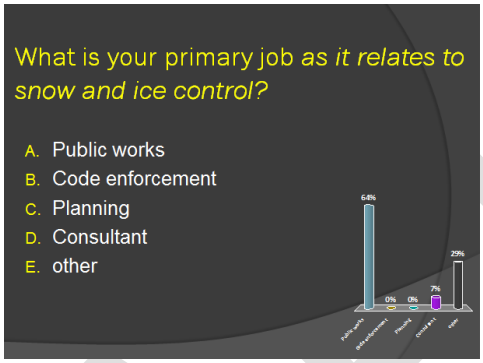
Brenda Z. handed over the session to Peter Coughlan from Maine Local Roads to conduct some poll questions with roundtable attendees and provide an overview of the manual contents.

Attendance at the Roundtable

After these introductory comments, Peter Coughlan of Mane Local Roads conducted a series of poll questions about who was in attendance at the Roundtable. Each participant was provided an electronic polling pad and asked to answer a series of questions.

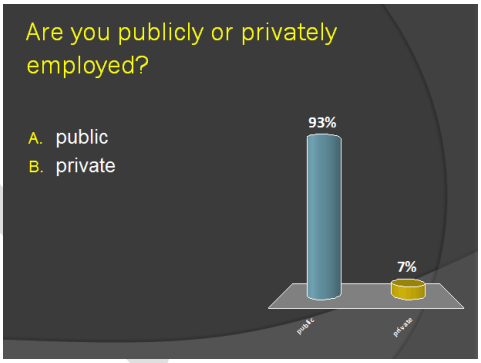
Position

Public works 64%
Other 29%
Consultants 7%
Code Enforcement 0%
Planning 0%



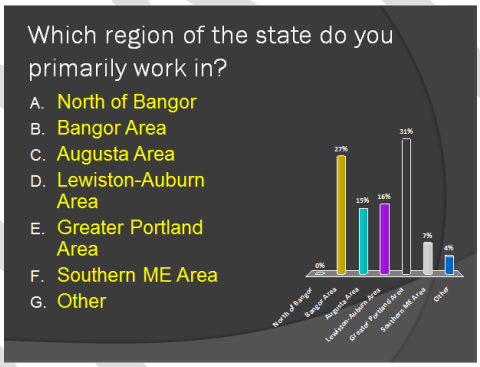
Employment

Public 93%
Private 7%



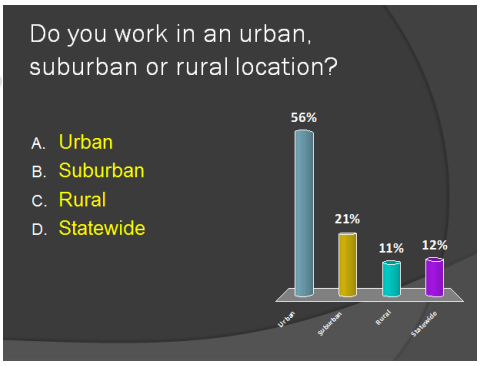
Region

Portland Area 31%
Bangor Area 27%
Lewiston-Auburn Area 16%
Augusta Area 15%
South of Portland Area7%
North of Bangor Area 0%
Other Area 0%

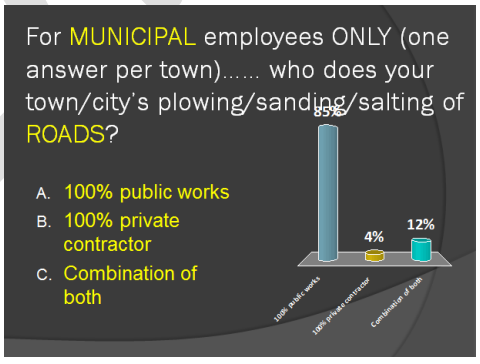


Work location

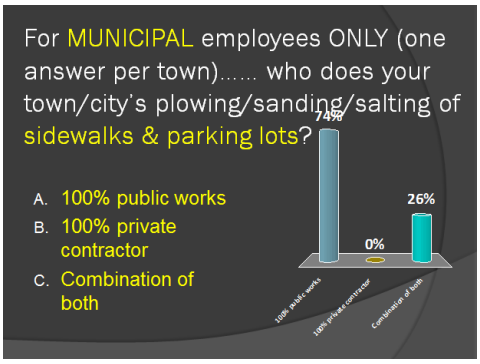
Urban 56%
Suburban 21%
Statewide 12%
Rural 11%



Who does your roads? (26 municipal responses)
100% public works – 85%
Combo of both – 12%
100% private contractor 4%



Who does your public sidewalks and parking lots? (26 municipal responses)
100% public works – 74%
Combo of both – 26%



Work in MS4?
Yes 85%
No 15%
Not Sure 0%

Aware of this effort?
Provided Input at Some Point 24%
Was aware but have not reviewed BMP Manual 34%
Was aware and have reviewed BMP Manual 21%
Had no familiarity before learning of this event 21%

What drives your snow and ice control decisions (ranked in order)
Public of safety 28%
Level of Service 25%
Budget 19%
Public or political pressure 18%
Environmental impact 11%

If want to adopt, how hard to get changes approved?
Moderate 51%
Easy 37%
Hard 12%
Note: Several participants informally comments that the level of difficulty in getting approval was dependent on what they were specifically asking for

Primary barriers to making changes (Based on selection of Top Three in ranked order)
Staff willingness to change 31%
Budget 27%
Internal decision making 13%
Public opinion10%
Liability 9%
Lack of training 7%
Lack of information about best practices 3%

Developing and Using the BMP Manual – Comments from Two Maine Public Works Staff

Erik Street is Director of Yarmouth Public Works. He has been a member of the working group for the last several years and an active participant in developing some of the BMPs. He became involved in the development of the manual to be able to report back to the Maine Chapter of the APWA and to ensure that what was being created by the working group would be consistent with stormwater regulations. He also wanted to share with others what his MS4 was doing in terms of BMPs, operational policies, etc., which had been successful in reducing chloride use and improving operational efficiency and cost-savings. He also wanted to learn from others about how they treat different storms, road conditions, etc. He wanted to ensure that the group promoted the provision of the best service possible while also addressing other issues.

Mike Gladu has been the public works director for the Town of Milford for the last four years. When coming into the position, he did not know a lot about snow and ice control. Milford's winter operations budget was predetermined and there was little support for any changes. In his first year in the position, the town went through 450 tons of salt, 1,500 yards of sand and spent 4,800 to clean-up. This investment was having a big impact on the town's budget. Through participation in the snow and ice control working group, last winter Mike tried some new practices, including adding one bucket of salt instead of sand. He used 150-250 pounds per lane mile, was doing a better job and cleaning up quicker with sand/salt mix. At the end of the winter, he had used 100 tons less salt over prior year (40% reduction). The use of the BMP matrix has made it possible to conduct assessment of practices himself, without consulting firm for planning. The content of the matrix has made a great "sales tool" for him by demonstrating what is already in place and his plans for the future, showing that he has thought about the range of options and selected what will work best for the town.

General Comments:

- The goal of this training is to share progressive practices that allow snow and ice control operations to reduce or use more judiciously chloride applications.
- Most participants indicate they are paying between $59 and $62 per ton of salt, making less product use financially desirable if it is balanced with maintaining public safety and level of service.
- Some participants shared their belief that the real problem is expectations by the public. Six or so participants indicate that they have worked on outreach/education about expectations (fliers, Facebook page, use of other social media).

Training on BMP Manual

Peter Coughlan of Maine Local Roads reviewed the content of the manual, sharing the key elements of each best practice and pointing out how to use the manual to select and adapt specific BMPs for municipal use. He walked participants physically through the manual, asking participants to look at specific pages and highlighting specific content. Peter pointed participants to the manual itself for more information on specific BMPs.

The manual lists the complete BMPs. These notes refer to the BMP text, rather than copy it. Notations in this section highlight where to find specific BMPs covered by Peter during the training and questions/discussion that occurred during the training. **Please refer to the BMP Manual for the complete BMP documentation.**

The first section of the BMP Manual outlines the **impacts of snow and ice control activities.** (Section 1-1). These include:

- Economic Impacts
- Public Safety Impacts
- Environmental Impacts

Peter pointed the participants to where additional information on impacts can be found in the Appendix A (A1-A8) of the BMP Manual.

Next, Peter highlighted the **Administrative Considerations** section (Section 2-1), which outline cost-benefit and liability information. Municipalities are provided with tort protection from liability. Contractors do not have these same protections; they have potential liability. If there were to be a voluntary certification program, this could help with reducing liability. Will learn about the NH Green SnoPro Voluntary Certification Program this afternoon and discuss whether or not there is interest in developing a similar program and protections here in Maine to help reduce liability for contractors.

Peter moved on to the formal recommended voluntary best practices in the manual. The first set of practices focuses on **Administrative BMPs** (Section 3-1) including developing Level of Service Plans and Maps, coordinating pre- and post-storm meetings to discuss what worked and what did not and made necessary changes based on this information. This section also covers weather forecasting services, which can take a number of forms a half dozen participants shared that they pay for a weather subscription. Most of the rest shared that they rely on local weather information (news, Acuweather, etc.)

The last BMP in this section covered Automatic Vehicle Location (AVL) systems. *City of Portland* shared that they have 18 trucks and have installed GPS in all trucks. It is set up with key FOB system, allowing the city to track which person was in which truck at what time. They feel it is a good system. Benefits include being able to see how they are running routes, can look at efficiency, and can help dealing with complaints (where the plow went, plow speed, etc.).

Their newest systems are able to show how much product is delivered, where, etc. They have found the systems to not that expensive and the value in helping prove the city was/was not at a specific location for complaints/ claims. However, there have been some negative reactions from staff. *City of Auburn* shared that they have put AVL systems on all plow equipment and gave all employees the login to the GPS.

Section 4-1 of the manual covers **product selection BMPs**, outlining best practice guidance for the use of salt, sand, liquid calcium/magnesium chloride, salt brine, liquid blends and pretreated salt. Peter encouraged participants to review in greater depth those that currently apply and those they might consider using in the future. During this part of the training, five municipalities shared that they have tried some form of brine.

Application Process BMPs for anti-icing and pretreatment BMPs are covered in Section 5-1 of the manual. This is a preventative mode of operation (rather than anti-icing). Peter provided a brief review of pre-wetting systems. Peter reminded participants that operators can get brine from DOT. Contact information on brine availability provided on a handout to all participants in their training packet. Brine is available in several locations throughout the state.

The next section of the manual (6-1) covered **best practices for use and care of application equipment.** During this portion of the training, Peter pointed out that not everything is expensive. For example, Pownall bought materials and built a system themselves at very little cost. Peter emphasized that the biggest thing municipalities can do is calibrate their equipment. He reminded participants that Maine Local Roads staff (Phil) is available to calibrate trucks with them. The last BMP for this section covered temperature guns/sensors. Most of the training participants use some form of temperature sensor/gun. Peter shared that municipalities should use them if they don't already,

Section 7-1 of the manual covers **storage, loading and washing BMPs**. Of these BMPs, Peter shared with participants that the most important effort is to fill properly and not overload. Most participants indicated that they have a large storage building. He reminded them that municipalities need to follow state regulations for snow pile placement. Almost no municipalities shared that they have snow melting equipment. Portland had researched options and found them to be very expensive and possibly requiring air pollution permits. Old Town has some basic melting equipment, but not on a large-scale.

The last section of the manual (8-1) identified **location-specific BMPs** for snow and ice control on parking lots, sidewalks and entranceways. Participants agreed that this set of BMPs might need some adaptation to respond to the private contractor audience's needs if a version of the manual would be developed to expand beyond the municipal audience of the current manual.

Case Study: State Operations

Presenter: Brian Burne, Maine Department of Transportation (Maine DOT)

Maine DOT has benefitted from adopting an anti-icing approach. Maine DOT started the transition in 99 and was well transitioned by 2002. The DOT moved from spreading sand to anti-icing. They started with a few pilot regions and then moved to using the approach statewide. The DOT has been pleased with the results. There has been a drastic reduction in sand use, decreasing from 500,000 cubic yards to 10,0000-12,000 cubic yards this past winter. In 2003-2004, DOT started to track storm count. The 50 crews on the road reported the storm and what work had been done for the storm. There is a direct correlation between the amount of material used and the number of storms (more storms = more material).

The following graphic indicates the statewide use of sand and rock salt over time. Red = amount of salt; Yellow = amount of sand used; Blue = applying today's cost to these materials combined (what would cost now). The white line at the top represents the annual average vehicle miles traveled (this is only an indicator, not direct correlation).

What does it do when reduce the use of sand? DOT has found there is a ripple effect through the system, with the following results:

- Elimination of the huge sand piles most places;
- Sand and salt intrusion private well claims significantly declined. A large percent of these claims were near stored salt/sand piles; large piles were a huge part of that. With these now eliminated, there has a been a huge cost savings from reduced litigation costs;
- Deicing in the past had required the use of 3000-5000 cubic yards of sand, but with anti-icing DOT only required 500-700 cubic yards for an average storm and 1,500 cubic yards for major storms (still less than half the amount used before change).
- Number of trucks reduced. When the deicing approach was used, DOT needed 477 trucks, but wince the move to anti-icing DOT now only uses 392 trucks. Eliminated 53 plow trucks; Got rid of all the loaders as well.
- One of the unexpected benefits of the reduction in sand use was its effects on the work schedule. With sand, work for snow and ice control was a year-round tasks including sweeping and sand management. By not sweeping or prepping as much, DOT picked up 6-7 weeks that it could do other work during the non-winter months, including ditching.
- Additionally, DOT found that they were reducing both environmental impacts and clean-up costs by no longer filling slopes/ditches with material.
- Windshield claims dropped to zero statewide – it was not not big cost annually, but it is another benefit. Before, there were hundreds f complaints annually.

DOT shared that moving to this new approach required developing a level of service (LOS) plan. While they received initial complaints about less trucks on the road, complaints leveled out quickly.

When asked about public safety, there are no specific data that show the relationship between the specific approach and its impact on accidents. However during this time, fatality rates have dropped. The amount of time roads have snow and ice on them is significantly reduced.

Although DOT does not have auto controls (i.e. they do not control how much their staff put out for salt), they train them and ask them to apply properly. DOT is able to track how much is being used by corridor and crew area, as well as how that compares to surrounding areas. They spend time educating the crew leaders about expectations, but do not set their spreaders for them. DOT did its own time-lapse study (6,8,10) that showed straight salt goes off the road, but with pre-wetting application stays on the road. DOT does not use liquid calcium chloride (price was the reason for switching). Brian also mentioned a new study from Michigan state indicating that slowing down application vehicles while applying and pre-wetting of materials is a huge help.

Auburn shared that they set the pounds per mile and have different setting for different parts of the event, letting crews know what level to do. Their staff has to get approval to increase it. Their staff has access to the controls, but they are trained to follow what is decided as optimal for each part of the event (not prescriptive). Auburn's settings are based on the old DOT system (temperature-based chart).

There is no current tool to determine how much salinity is on the road. People often underestimate how much melting even a small amount of salt can accomplish. The most promising tool that DOT is switching to is "switch sensor" which is a camera looks at the road and figures how much water, ice and snow is on the road and look at "grip factor" (slipperiness). Utah created a measure to determine how to use the tool. Supervisors like the tool and find it helps them make decisions. However, it is kind of pricey --- to sample one spot requires an investment of $40-50k for installation.

DOT also uses a weather information system called MADUS. This system has a web site that aggregates all the information. All new DOT plow operators are required to take a training called Winter Snow and Ice Experts training.

At DOT, sand is still a tool in the toolbox, but is only used when temps are too cold for salt to be effective. For the public there is a (for our purposes negative) psychological effect of seeing sand – it makes drivers feel they can go faster. DOT also uses sand for hills that cannot be maintained with just salt (can't keep on top of it enough). DOT does not use Fusion, a beet juice product. Without the chloride, DOT has found it does not hold up.

Whenever DOT builds a new facility, they now include a wash bay and use low pressure wash when outside. Also noted that Soap pH can increase corrosion with salt

DOT does capture the water from its snow and ice control operations, but generally does not reuse it, as the oil needs to be separated from it and it is less expensive to just pay to properly dispose of the polluted tank water.

Finally, Brian shared that the DOT's Clear Roads research organization (www. clearroads.org) has just released a BMP Manual for Snow and Ice Control. However, the manual is more focused on theory than on-the ground practices. The Maine practice-oriented BMP is more useful for training purposes. The two manuals are complementary.

Case Study: Towns of Pownal and Durham
Presenter: Shawn Bennett

Shawn is the former public works director in both Pownall and Durham, two municipalities have been very successful in reducing sand and salt use and associated costs. He managed 114 miles of gravel and winter roads and contracted winter maintenance. Over the last ten years, the municipality used approximately 3,000 tons of salt annually. The contractor was required to put up approximately 4,000 cubic yards of sand (more last winter). Last year projected the use of 1,400 tons of salt and 1,200 yards of sand. He had a new crew and it was a cold winter. However, he had switched from deicing to anti-icing and replaced his old system with side dump/high capacity systems and installed ground speed units in all the trucks. He shared that this new system had no fancy bells and whistles. Over last 11 years, he has been able to reduce salt use by ~40% as a result of calibration, while his Level of service (LOS) has increased dramatically. The reduction has been from 35 tons of salt per storm event to 20 tons of salt per storm event.

Currently, both municipalities pretreat prior to a storm, pre-wetting the salt. They generally use salt brine unless temperatures are prohibitive. This pre-wetting process has taken various forms over time. In the early years, pre-wetting was done using a garden hose, then moved to homemade onboard pre=wetting. They made a strong effort on "salt priority" last season –both towns are strictly under a salt priority. Shawn emphasizes the importance of scraping roads, sharing his belief that the plow is the most effective tool in getting snow off road. He says that you know you are doing it right when you see sparks off plow.

Sand is an important issue. A cost of sand includes $3-4 per linear foot to clean ditches, which generally loses an inch per year to sand. Sand clogs pipes, creates dusts, and introduces sand and silt into waterways. The two municipalities have worked hard to reduce sand usage and have done so successfully, reducing from 40-50 yards of sand per event to 20 yards per event currently. Salt priority has worked much better at clearing the road. Sand reduction came down to educating motorists and operators and getting people used to not seeing the road brown all the time. He argues that it is important to have as many tools as possible to address winter maintenance conditions. Overtime savings from pretreatment efforts could be huge for larger towns.

Calculated Savings:

- Saved in quantity of salt
    - 2011 Salt 34,5000, 27,000, 30,000
    - Went to salt brine 1,200 gallon tank , pressurized, more control
    - Cold weather temp and condition limited brine pretreating efforts
- Saved in quantity of sand as well
- Saved approximately $7,000 ***and*** increased level of service simultaneously
- Saved 15 hours overtime by doing salt brine treatment (did pretreatment during regular hours

Case Study: Towns of Richmond and Dresden

Presenter: Alan Moeller

Alan Moeller is the Director of Public Works in Richmond. ***Richmond*** used to have pay $20,000 for sand, but now pays $ _,000 for sand. This represents a $50-60k drop in their sand budget. Now every load out of shop has two extra buckets of salt; they are able to be there within half an hour. Clean-up is much better, This switch has, according to Alan, "made a believer out of me." Now they mix brine every time the trucks go out and it is the only application they do except for dirt roads, where salt does not work. The Town doesn't want calcium chloride.

Alan is also on the Town Council for the Town of Dresden. In the past, Dresden always used 4k yards of sand no matter what. Now use 60% salt and never use up their whole amount. The town still has a long way to go with calibration. They do have temperature gauges and have found 6-7 degree differences in different locations throughout the municipality. Getting buy-0in for these changes was had to get from area contractors. However, buy-in was achieved when council representatives were receiving compliments. (Comment that was well-received by training participants: "one compliment out of a hundred is food." Alan is not a big believer in straight salt yet.

Afternoon Poll Questions

Contractor Training

Increased 23%
Required 34%
Voluntary 30%
Existing adequate 13%

Rank importance (Reality, not what it *should* be)

Contract price 31%
Responsiveness 44%
Certification in use of BMPs 25%

Interested in a voluntary program like NH has
Yes 76%
Maybe 15%
No 9%

You or your contractors use it?
Yes 87%
Maybe 9%
No 4%

How likely to be used for <u>Road</u> work by contractors (without certification)
Very likely 29%
Maybe 42%
Not at all likely 23%
I have no idea 6%

How likely to be used for <u>Sidewalk and parking lot</u> work by contractors (without certification)
Very likely 15%
Maybe 48%
Not at all likely 33%
I have no idea 4%

Do these BMPs need to be changed?
Completely rewritten 0%
Significantly modifies 0%
Slightly modified 43%
Work as currently written 57%

Snow and Ice Listserv for Maine People
Yes 81%
Maybe 10%
No 9%

<u>Roundtable Discussion</u>

Discussion about the goal of "bare tar"

- Brine may not get roads to bare, but does prevent bonding of snow and ice to the pavement
- Old Town uses brine, minimizes plowing
- Orono shared that they can't always get to parking lots ahead of the storm (parked cars); have been working on planned approach to enable brine treatment
- If the ground is bare and wet – using too much salt on a parking lot
- Temperature is an issue and a consideration; coastal climate plays a role

- Participant recommended treating a smaller area during the storm and larger after the storm

Use of Public Education to reduce expectations

- Participants agree that public is unlikely to return to old expectations (snow on road until days after storm)
- Shawn Bennett is using public education to reduce the expectation of bare roads
    - Decrease product and INCREASE level of service (can only do if increase LOS)
- Colorado resident in attendance explained that in Colorado driving on snowpack is considered okay by residents, but acknowledged that in Maine the temperatures stay very cold for longer periods of time
- Do people understand the "level of service: priorities when plowing takes place? Many citizens believe that their road should be a priority, when it is a side road
- Several participants argued that Maine DOT has created a culture of black, wet roads (creating expectations for nearby municipal roads to match this condition).

Discussion of Road Conditions

- Do black roads = better safety? Black, wet roads are safer than snowpack. Black, dry roads are the safest (Maine Local Roads)
- Is setting a salt priority also committing to black roads?
- Stopping distance is what is key to safety

Level of Service

- What has been done historically – write it down, review with staff
- If changes, likely to need a political process to approve
- Auburn has a well-developed level of service (LOS) plan that they would be willing to share so that it could be developed into a template for other municipalities/MS4s to use
- Should be in contract or manual contractors use about which roads are priority
- In one municipality, they provide training , priority plan and product to their contractors, so that there is no disincentive for their over-use of product or deviation from town's winter maintenance priorities

Concerns about Total Maximum Daily Loads (TMDLs)

- There are concerns that Maine could eventually have a chloride TMDL
    - Most participants think coming down the road in 5-10 years
    - May be more focus on reducing salt in the most vulnerable places, instead of statewide
- Everyone (including the state) would be locked in
- TMDL was the reason New Hampshire looked at a certification program
    - Provided a shield through training and certification
    - Helped communities reduce the total quantity of chlorides in each community

Strengthening Volume 2.0 of BMP Manual

- Strengthen parking lots and sidewalk BMPs in the manual

Voluntary Contractor Training and Certification

- Learn from New Hampshire how they "pulled it off"
- Tamara Lee Pinard (CCSWCD) has legislative wording from Eric Beck at NEIWPCC on liability assurances that could serve as a model for Maine.
- Would need a senator or local representative to be a sponsor through the legislative process
    - May want to identify someone on the Natural Resources Council
- Need buy-in from contractors (small businesses)
    - Source of protection
    - Good with state ("A happy DEP is a benefit to municipalities")
    - Pro small business
        - Want to get hired (could increase competitiveness)
- To garner political support want to make sure calling key politicians
    - 10 calls on a topic get legislators interested/excited about a topic
- Barriers
    - Local ordinances and certification may be a mismatch in some areas
    - NH Training does not include Magnesium Chloride training (participants indicated that its use is different enough that needs to be added)
    - Need to include any products with sugars
- Funding

Next Efforts Require Funding

- Funding for this effort ends with this roundtable
- Suggestions for funding included:
    - Federal Clean Water Act (CWWA) NEPDES Funding (Maine Department of Transportation (MDOT) and Maine Turnpike Authority (MTA) are MS4s)
    - Business support for these efforts (in their best interest)
        - May want to meet with businesses to garner support
        - Currently they generally pay per ton (incentive to reduce)
        - Two key businesses who might be interested are Walmart and Hannaford in Maine

<u>Other issues:</u>

Pile placement needs to be a consideration by developers

- Long Creek Watershed Management District already working on this issue

Target Audiences for Chloride Work and Messaging

- Municipalities
- Contactors
    - Contracted by municipalities
    - Contracted by private sites

- Private Landowners
    - May want to look at connecting through partnerships with:
        - AGC
        - MAERITA
        - Maine Chamber of Commerce
        - Council of Governments (COGs)
        - Board of Pesticide Control

Prioritized Tasks for Next Project Steps

- Meet with/Interview New Hampshire Certification Program regarding process, outcomes and obstacles
- Internal discussion for Maine Local Roads to determine whether or not able to take on running the Certification Program with DEP approval
- Meet with the new DEP Commissioner regarding support for/taking on a voluntary certification program
- Explore funding sources – NPDES funds (MS4s, DOT, MTA) and businesses (Hannaford, Walmart, etc,)
- Reach out to Maine Municipal Association (MMA) regarding advocating for liability protections for certified contractors
- Meet with business organizations (Chamber, etc.)
- Identify business-friendly messaging for the certification program
- Speak with insurance agency groups about impacts of program in New Hampshire
- Conduct education and outreach on BMPs and certification process with towns
- Development of a Level of Service Template (based on Auburn)