

BAXTER & WOODMAN NEWS

Consulting Engineers

Making a positive difference through innovative engineering solutions

Improve Safety and the Environment

SENSIBLE SALTING PRACTICES

Since the 1930s, sodium chloride (NaCl), or common salt has been used to make our roads a safer place to travel in bad weather. However, road salt can be corrosive to vehicles, roadway surfaces, parking lots, driveways, and bridges and may contribute toward an adverse effect on the environment. Research indicates increasing trends in chloride concentrations have been observed in water bodies of the U.S. and attributed, at least in part, to road salt influence. High chloride concentrations in freshwater can harm aquatic organisms hindering their survival, growth, and reproduction. Therefore, a reduction in salt use, through sensible salting, is a good practice to help reduce the risks of chloride contamination to our waterways.

Advanced technologies, such as anti-icing, and pre- or early-storm treatments can help ensure safe driving conditions and maximize road salt effectiveness. Several methods can be used including:

MANAGEMENT AND TRAINING

Educating and training personnel to apply the salt in an effective manner can be an effective means to reduce salt usage. Demonstrating how to apply just enough salt, using specific timing for the salt application, and relying on careful forecasting have all been shown to reduce chloride usage.

ANTI-ICING

Anti-icers limit the impact of snow and ice. Anti-icing, when done properly, can melt the first centimeter or two of snow. Anti-icing prevents the bond of snow and ice freezing to the road surface and can reduce or even eliminate the need to salt in some instances.

PRE-WETTING

Prewetting is the process of spraying salt with a solution of liquid chemical before spreading the salt on roads. Salt requires moisture to be effective as a deicing agent. When temperatures dip below the freezing mark and there is no moisture on roads, salt is not effective at deicing. Prewetting the salt ensures that there will be enough moisture to help the melting process and the wet salt is more likely to stay on the road instead of bouncing off or being brushed away by traffic. The result is less salt is spread, saving money and minimizing the threat to the environment.

In addition to the methods described above, let's hope for a mild winter to minimize the amount of salt needed to keep our roadways safe to travel!

DECEMBER 2017

INSIDE

2 SB550 Lead Law Reminders

4 B&W Launches Corporate Charity

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SB550 LEAD LAW REMINDERS

LEAD SERVICE LINE REPLACEMENT CONSIDERATIONS

Although lead pipes were banned by the USEPA after 1986, the quantity of lead services in each community can vary. There are many resources available to help your community tackle replacement of lead services. Don't wait until the last minute – Illinois Community water systems are required to create and submit a distribution system material inventory to the Illinois Environmental Protection Agency (IEPA) on an annual basis commencing on April 15, 2018 and continuing each April 15 in subsequent years until the inventory is complete and “until all lead is removed”.

Many communities are evaluating whether or not to complete full lead service replacements. While the USEPA does not currently require the replacement of lead services, full service replacement may be the proactive direction your community selects. The Lead Service Line (LSL) Replacement Collaborative is a tool available if you are considering full service replacement.

THE LEAD SERVICE LINE REPLACEMENT COLLABORATIVE

The Collaborative is comprised of public health, water utility, environmental, labor, consumer, and housing organizations from across the United States working together to encourage communities to accelerate the full replacement of LSLs through joint efforts at the local level. The Collaborative's goal is to accelerate voluntary LSL replacement in communities across the country. To achieve this goal, the Collaborative:

- Prepares information, tools, and models for LSL replacement
- Provides achievable, cost effective, safe LSL replacement options
- Captures and shares community lessons learned
- Offers technical assistance in forming LSL replacement initiatives

Web-based tools and resources from the Collaborative include:

- A roadmap to help communities plan for LSL replacement and target initiatives to local circumstances
- Replacement practices with technical information and tools to successfully carry out LSL replacement

Continued on next page

Lead Service Line Replacement continued

- Policy opportunities to better support local utility and community efforts to find and replace LSLs
- Additional resources and information useful to community leaders, elected officials, and drinking water professionals

To explore these tools, please visit: www.lslr-collaborative.org

HOW B&W CAN HELP

Baxter & Woodman can help you develop a LSL system inventory. GIS is the perfect application to help your organization meet the SB550 requirements. Inventory solutions can range from developing a basic install date map to developing interactive mapping to engage and educate your residents.

For additional information on LSL tools contact Carolyn Grieves at cgrieves@baxterwoodman.com or Sean O’Dell at sodell@baxterwoodman.com or 815-444-3230.

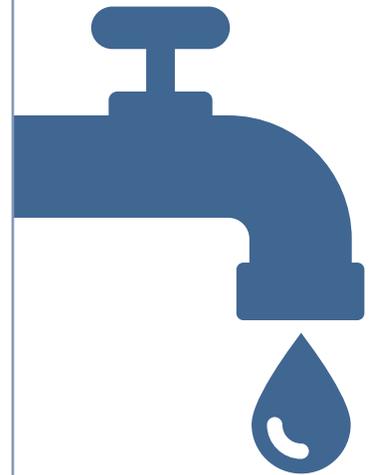
RESOURCES

Keep tuning into the following resources to get the up-to-date information regarding lead services.

- www.epa.gov/dwreginfo/lead-and-copper-rule
- www.isawwa.org/general/custom.asp?page=LeadinIllinois
- www.awwa.org/resources-tools/water-knowledge/lead.aspx

LEAD SERVICE LINES ARE STILL PREVALENT IN MANY COMMUNITIES

Estimated Number of LSLs by State and Water System Size (from AWWA)				
STATE	WATER SYSTEM SIZE (POPULATION SERVED)			
	<10,000	10,000-50,000	>50,000	All Systems
Illinois	76,000	240,000	410,000	726,000
Wisconsin	36,000	70,000	130,000	236,000
Florida	6,000	64,000	130,000	200,000



Does compiling lead service data seem overwhelming?

Our GIS staff is ready to help organize, manage, and illustrate your lead service data. Community water supplies should start to compile all lead service data (service cards, meter change out records, water main replacement information, etc.) to comply with the IEPA Lead and Copper Rule requirements.



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'Tis the Season for Giving!

BAXTER & WOODMAN LAUNCHES CORPORATE CHARITY

B&W Cares is a corporate 501c3 charitable organization created by Baxter & Woodman to support the efforts of employees, their families, and the community to make the world a better place while exemplifying B&W's core corporate values. B&W Cares will be funded by employee donations.

Baxter & Woodman has a long history of giving back to the community through organizations such as the United Way. Over the past 50 years, Baxter & Woodman has proudly donated over \$1 million dollars to United Way! This newly formed charity offers B&W staff the opportunity to expand on that tradition.

B&W Cares is supported by an Allocation Committee of volunteers from across the company. The Committee determines what charities to support and how to distribute the B&W Cares General Fund.

In 2018, B&W Cares will support United Way, Water for People, Engineers Without Borders, and Global Water Stewardship. In addition, the B&W Cares General Fund has been established to assist with immediate needs, such as a natural disaster.



B&W Cares held a launch party on November 2nd, 2017. Representatives from the B&W Cares supported charities spoke about their organizations, and employees learned about ways to support the charity.

