Ahead of the Pack

By Connie Forten of Forten Consulting

As budgets tighten but the demand for high levels of service increase, the snow and ice management industry is stressed to do more with less. We no longer have the luxury of time to melt from the "top down"—a slow and expensive process, both economically and environmentally. Our melting should be targeted at the pavement surface. Anti-icing—"bottom up" melting—will weaken the bond between ice and pavement, and allow quicker success in snow removal.

Which of the following proactive steps can you incorporate into your snow and ice management plan? Whatever you decide, make sure it is documented in your winter maintenance policy—and

that both your crew and clients are informed.

Anti-icing in advance of the storm. By monitoring the weather and applying a small amount of liquid deicer before the snow, the bond between the snow and pavement will be weak. Plowing will be more successful, and the amount of chemicals needed to hold the site post-storm will be reduced. Liquid de-icers, although commonly chloride-based, are 70% to 80% water. Any time a liquid product can be used instead of or to reduce the amount of granular product, it will speed up operations. It will also lower the total amount of salts applied and help protect our water.

Aggressive mechanical removal starting at the first snowfall. If you have a 2-in. trigger policy, you may arrive and the snow has already been driven on and is compacted. Long hours of scraping and salting are needed. The best policies synchronize mechanical removal with the start of a storm. With a proactive plowing policy, more time will be spent plowing in the beginning, but less time and chemicals will be needed in the long run.

Smart location of snow piles. Snow piles are full of salt and debris. You cannot recover the salt, but you can recover the debris. Place piles on a hard surface that can be swept in the spring. Do not use grass areas, ponds or wetland for snow storage. Consider the location and slope of the storage site. Can you place the pile where snowmelt will not run across the parking lot, causing refreeze problems? Property assessment. Persistent ice slicks or trouble spots, often on sidewalks, are caused by poor drainage. Document these areas and discuss them with your client. Repairing these problems in the summer can help lower the risk for slip and falls.

Education. As our tools and techniques change, invest time in educating your clients and your crew. Help them understand new reasons and practices for being proactive. People are more comfortable with what they have done or seen for years. New practices shouldn't just appear—they should be explained upfront, managing everyone's expectations for a smooth complaint-free winter season.

Our winter maintenance practices over the past 50 years have accelerated the amount of salt entering our freshwater systems. Although salt is a useful, affordable de-icer, it is a permanent pollutant to our freshwater systems. We should challenge ourselves to manage snow and ice most efficiently with the least amount of salt. In the cold-weather states, lakes, rivers and aquifers are showing increased salinity. By integrating proactive practices into your operations, you will help your customer, your business and our lakes and rivers.

Pre-treatment will make your life easier and surfaces safer for your patrons.
photo, Ken Rost