

Dear Mr. Phillips,

11/21/15

Thanks for your letter of Oct 30 describing the proposal to spray salt solution onto the Southwest Path as an “anti-icing” step before predicted snowfalls. You state that “this method of snow removal follows the current state of knowledge regarding best practices”, but I could only find this practice applied to highways and streets. These situations involve the tire action of motor vehicles in both the compaction of snow and the final transition to bare pavement after plowing. I found no reference to brine pre-treatments on bike-pedestrian paths in the comprehensive [MN DOT Anti-Icing guide](#), for example.

Your proposal entails regularly flinging brine-laden snow into a beloved and unique landscape of wetlands, prairie and forest habitat. Even before construction in 2000, [various design committees](#) recommended no salt because of native plantings and direct drainage to Lake Wingra. This was followed for many years until spot applications of rock salt started about 5 years ago. Distribution of salt solution along the whole path before each snowfall means even more salt, both in frequency and spatial extent. This is because brine pre-treatments will not prevent or fix the main slip hazards now being spot-treated with rock salt, so adding the brine just adds more salt into the environment.

Salt in any form diminishes the comfort and usability of the path for all winter users. The SW Path has long been an exquisite refuge from the noisy, corrosive and slushy winter street environment. We should not be bringing the worst winter aspects of urban streets into this unique green transportation corridor. Path users don’t want salt, and a non-chemical approach is an achievable goal.

Chemical-based methods should not be utilized (especially in sensitive natural areas) without at least exploring [mechanical snow removal methods and policies](#) that are appropriate for an off-street path. It is great that you acquired a new brush attachment. One was used to reliably clear the path (without any corrosive brine pre-treatments) for about the first decade of the SW Path’s existence.

The photos and observations that I shared with city staff in August were about eliminating ice creation arising largely from your own operations. Staff confirmed that the existing protocol deploys plows “whenever a cat’s paws would make a track” (not after 1” as you stated in your letter). This results in excess compaction and smoothing that I and others have observed for a number of winters. This wouldn’t be so bad except that it apparently sometimes led to “corrective” treatments with rock salt.

This “Zamboni” effect results from attempts to achieve bare pavement in the middle of winter, when it is not a realistic or necessary goal. Please consider a “grooming” protocol instead, plowing only after a certain amount of snow has fallen since the last deployment, instead of after every flurry. Adding a simple grooming tool to the plows (**e.g.** a drag bar or short loop of heavy chain) would automatically replace the granular traction layer scraped away by the plow with each pass. These simple changes in operations would probably eliminate most of the icy surfaces that now regularly occur on the path.

A rare, but dangerous slip hazard sometimes forms in low spots because of water pooling during warm spells, then re-freezing. This type of ice patch will *not* be prevented by your proposed brine pre-treatment. In recent years, these low-spots have been addressed by lots of rock salt, resulting in slippery, corrosive and toxic slush. All of this could probably be prevented by modifying the operational protocol to include plowing (or brushing) during thaws. I am guessing this “path-specific” winter maintenance step may have been overlooked because it is rarely an issue on streets and highways, where isolated puddles are readily splashed away by vehicle tires.

As a year-round cyclist and runner, I cannot overstate what a precious asset this path is to the daily lives of the people that use it. The path is always immediately cleared in winter, and I can buy groceries, visit friends, or commute all the way from the near west side to downtown with little exposure to traffic or salt slush. Many of us will simply not ride our bikes on a pavement recently wetted with a high-concentration salt solution. Your new protocol will be akin to exposing our bikes and clothes to an industrial corrosion test every time we happen to use the path before and during a snowfall.

Although you refer to it as a “Bike Path”, I’m sure you realize that the Southwest Path is a shared-use path. Because the city only monitors bike traffic, you may not know that the number of walkers and runners often outnumber cyclists by a wide margin, especially during winter months.

The pedestrians that walk dogs in the summer usually continue to do so in the winter, regardless of weather. Salt brine is [harmful to dogs](#) and can cause illness if ingested. Salt or brine residue also causes chemical burns and frostbite to paws due to its sub-freezing temperature. Along with cyclists who don’t want to expose their bikes (and the environment) to salt, the substantial winter constituency of dog-walkers was apparently overlooked when this salt-brine plan was developed. This chemical-based plan may have appeal for highways and streets, but it actually runs counter to the idea of “balancing the needs of all users” of a shared-use path.

Here are some questions that I and other path users have:

1. A brush with no salt or brine was effective in the past. Can this be tried on the main path first?
2. Would it be possible to use the brine pre-treatment/brush on ramps and bridges, where it might actually result in a salt reduction from the current practice of using uncontrolled rock salt?
3. Why not incorporate sand or other (organic?) traction agents into the maintenance protocol?
4. Is salt brine used on shared-use paths elsewhere? In green spaces that drain into freshwater?
5. Were you planning to post signs notifying users whenever the path has been wetted with sodium chloride solution, so they can avoid the path with their bikes and dogs?
6. Can “no salt” on Madison bike paths become an operational or developmental goal?

The brine proposal seems to reflect little or no input from winter path users or neighborhood groups. Contaminating one of the cleanest places to walk, run and bike in winter will not be popular among path users that become aware of it. The most adamant opponents of salt use on “bike paths” are, in fact, winter cyclists. A [petition](#) against your proposal was enthusiastically received at area bike shops and collected signatures rapidly (110 in about a week). Bike shop staff suggested that the wording on the petition be changed to ban salt from *all* Madison paths.

It is hard to believe that the most corrosive and toxic solutions are really the best future for this iconic green transportation corridor and other Madison paths. I have seen examples of great engineering from your department, but I feel this plan mistakenly applies methods and materials from the world of motor vehicles into a non-motorized greenway where they don’t belong. Regularly hauling a brine tank through an iconic urban greenway in a vulnerable watershed not only sets a terrible example, it is quite literally “bike un-friendly”.

Thanks and Regards,
Perry Sandstrom
For the Southwest Path Alliance - Madison, Wisconsin