

Environmentally Speaking, Does It Matter If We Dump Snow into the Ocean?



With record snowfall accumulating in and around Boston this year — February has been the snowiest month on record — city and state officials have a tricky job: Figuring out what to do with all the white stuff. Earlier this month, the Massachusetts Department of Energy and Environmental Affairs, gave the green light to dump snow into Boston Harbor and other “open water with adequate flow.”

Until 25 years ago, ocean waters were a common repository for snow overflow. But then “a massive cleanup of Boston Harbor gained momentum,” The Boston Globe reported.

Intellectually, it seems like there could be something to the notion that dirty salt-and-oil-filled snow would, in some way, affect the waters into which it’s being dumped. But several scientists we spoke to don’t see it as much of an issue.

“This is such an extraordinary circumstance,” Raymond Najjar, an oceanographer in Penn State’s Department of Meteorology, told weather.com. “It’s not like we’re doing this all the time.”

Climate Scientist Michael Mann, also at Penn State, envisions an extreme situation in which putting snow into the ocean could lower the salt content and temperatures, but he told weather.com it’s not that likely. “It’s possible if you dump enough snow, especially with the record snowfall we’ve seen this season ... that you could potentially noticeably change the temperature and salinity of the waters,” he said. But, he added, “I suspect [the impact] is pretty modest.”

Najjar points out that the snow will likely end up in the water anyway, via runoff when it melts. “It’s just whether it goes in all at once,” he said. “If you have a quick

warm up, one of these rain-on-snow events, I’m sure you actually get more going in than a lot of trucks just dumping it.”

Even Bruce Berman of Boston-based Save the Harbor Save the Bay, talking on the Rachel Maddow show, concedes the circumstances this winter have been exceptional. “When the water is fast moving it doesn’t concern me that much,” he said about dumping the snow. He added: “Certainly snow is filthy. Urban snow is dirty, and it’s not our favorite resort, but at the end of the day, public safety first.”

What concerns Najjar more — and he said there’s a body of research supporting this — is the effect of road salt on smaller water bodies. “Streams are getting saltier over time. It is affecting invertebrates and other organisms counting on the water being pretty much fresh,” he said. “Just walk around. You see these mounds of salt everywhere.”

Given that winter is just two-thirds of the way through, the where-to-put-snow debate in Boston is far from over. For the moment, however, the piles stay where they are, the oceans flow in and out as they do.

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