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Christopher Amato, Esq. Conservation Director and Counsel August 29, 2023

Hon. Kathy Hochul Governor Executive Chamber State Capitol Albany, NY 12223

Re: Adirondack Road Salt Reduction Task Force Report Must Be Released

Dear Governor Hochul:

Red leaves are popping out on the roadsides and mountaintops across the Adirondack Park. As our Summer fades into Fall, now is the time to start planning for ways to mitigate salt pollution in the Adirondacks. As you know, road salt pollution in Adirondacks lakes has been well documented over the last three decades. In response, the State of New York passed and signed into law the Randy Preston Road Salt Reduction Act in December 2020, which organized the Adirondack Road Salt Reduction Task Force in 2021. The Task Force is by led by Department of Environmental Conservation (DEC) and Department of Transportation (DOT). Now, as we head into the Winter of 2023-24, we need to realize the promise of the Task Force and see the long-awaited report released to the public and a plan launched to combat road salt pollution.

Salt pollution is unquestioned. The data from various long-term research projects has proved the case and shown the impacts of road salt pollution to Adirondack waters. Protect the Adirondacks and the Paul Smith's College Adirondack Watershed Institute are in their 26th year of a partnership monitoring lakes and ponds across the Adirondack Park through the Adirondack Lake Assessment Program (ALAP). This program has compiled a long-term dataset of over 70 lakes that is invaluable because it provides 25-year trend lines about the water quality of many major representative lakes and ponds across the Adirondacks. ALAP is a key source of road salt pollution data in the Adirondack Park along with the Lake George Association (LGA)/RPI Darrin Fresh Water Institute's long-term study of Lake George. Blue Mountain Lake, in Hamilton County, a lake that you have visited and know well, is a case study about road salt pollution. The Lieutenant Governor, Antonio Delgado, was also just in Blue Mountain Lake this summer. From a standard trophic status water quality assessment that looks at phosphorus levels, chlorophyll-a levels, and transparency, Blue Mountain Lake is categorized as an oligotrophic lake, a lake with the highest water quality in New York State. Blue Mountain Lake regularly sees water clarity readings of 9-10 meters, which is a very high level of clarity for an Adirondack lake where the average is around 4 meters.

Unfortunately, Blue Mountain Lake also ranks very high as a waterbody significantly influenced by road salt. Sodium and chloride concentrations, the key substances in road salt, hit levels of 14 mg/L and 19.9 mg/L respectively in recent years, indicating that salted roads in the Blue Mountain Lake watershed are impacting the chemistry of the lake. Its chloride concentration is greater than 86% of ALAP lakes and is approximately 100 times higher than background concentrations, or the natural level.

The high salt levels in Blue Mountain Lake are due to runoff from NYS Routes 28 and 30, which drain into three streams in the lake's watershed -- Minnow Brook East, Museum Brook, and Potter Brook, as well as 587 hectares of land along the lake that is not drained by any specific tributary, but through which salt travels into the lake through the groundwater or sheet flow stormwater runoff. The big hill in Blue Mountain, known locally as Museum Hill, flows into Museum Brook.

In the Adirondack Park we're a landscape arguably more shaped by cold than warmth. We have six full months of winter and even though in this new era of climate change where it's just as likely to rain as it is to snow in the winter, November to April is still predominantly cold, winter months. That said, it's also not uncommon to see salt trucks out on the Adirondacks highways in October and even in early May during a last-gasp freak snowfall.

Across the Adirondacks, it is estimated that 193,000 tons of salt are put down on state and local roads each winter, about 110,000 tons on state roads alone. The NYS DOT applies on average over 23 tons of salt per lane kilometer on state roads annually. A standard state road, such as Routes 28 or 30, that runs east-west and north-south through the Park, has two lanes, so the math doubles. When we shift to miles, this means that over 32 tons of salt per mile are applied on these roads. Given that there is just over 11 lane miles of state roads in the Blue Mountain Lake watershed, a coarse estimate, along with local roads, of the annual road salt load dumped around the Blue Mountain Lake watershed roads is over 400 tons per year. Try to picture all that salt in terms of the filled beds of a long line of 2-ton pickup trucks.

Scientists have calculated that 50% of the salt applied to Adirondack roads is washed into a stream and then carried to a lake or wetland. The other 50% travels to lakes and wetlands via groundwater from salt plowed onto the land, or blowed off the road, that creates a salt bank in the upland soils of a lake and pond. The salt in the salt bank is then carried to lakes, streams, or wetlands from groundwater charged by rain. Scientists have

found that in summers with heavy rainfall, such as 2023, the salt loading to lakes in summer months can often top loading in winter months. Pollution of groundwater has also contaminated hundreds of wells of residences and businesses across the Adirondacks.

Salt is homegrown pollution that we're choosing to do by ourselves. Surface water in Adirondack lakes has naturally low concentrations of chloride. The only natural source of chloride is the slow weathering of granitic bedrock and a small contribution from atmospheric deposition. In the Blue Mountain Lake watershed, for instance, Beaver Brook and Minnow Brook West are two streams on the west side of the lake that largely drain Forest Preserve and conservation easement lands that have no salted roads. These streams provide a good benchmark for the non-impacted streams, or streams in a natural condition, that illustrate baseline "background concentrations." Testing has shown that salt levels in these streams is negligible.

In Minnow Brook East, Museum Brook, and Potter Brook, all of which are impacted by state highways, the salt levels are 25 to 100 times greater than in natural streams. To be crystal clear, the only plausible reason that we see such high levels of salt in these three streams is because we dump a lot of salt in them.

For Blue Mountain Lake we have conclusive data about road salt pollution. For Lake George we have conclusive data and communities on the lake have taken action to reduce road salt applications by local highway departments. On dozens of other lakes and ponds in the Adirondacks, and in many streams in the Park, we have conclusive data on salt pollution. Yet, year after year, winter after winter, snow and ice storm after snow and ice storm, nothing is done to reduce salt pollution in Blue Mountain Lake and most other negatively salt-impacted lakes in the Adirondacks. Across the Adirondacks, there's no state-led experimentation with different technologies. There's no innovation. There are no changes to winter road de-icing practices, no trial and error, no new technologies, no reforms, no roadmap to reduce or eliminate this pollution. Just pour on the road salt and flush it into the lake. Blue Mountain Lake is a salt polluted lake, and it is not alone.

Lake George has seen a tripling of salt concentrations in the last three decades and that trend must be reversed. Recently, Lake George has seen considerable experimentation in winter roads management where the LGA and Lake George Waterkeeper have worked hand-in-hand with local governments to reduce salt use. They've tried different blades on snowplows, new metering equipment to regulate the dispersal of salt, using less salt, and using salt brine, among other practices. The results are eye-popping with several Lake George towns, like the Towns of Lake George and Hague, seeing 50% or greater reductions of salt use.

Mirror Lake in the Village of Lake Placid has experienced steadily escalating salt pollution trends for years, which scientists believe changed key ecologic functions in the lake. The Village of Lake Placid has recently embraced new practices to reduce salt use in the Mirror Lake watershed. These reforms have helped to bend the upward curve of Mirror Lake salt levels.

It's intolerable that many of the Adirondack Park's grandest lakes are polluted by road salt. The intolerable shouldn't be tolerated. The Adirondack Road Salt Reduction Task has had enough time. Adirondack communities must not be made to continue to wait and continue to endure pollution as usual with no action.

We urge you to demand that the Adirondack Road Salt Reduction Task report is finalized and released as soon as possible.

On behalf of the Board of Directors of Protect the Adirondacks, please accept our gratitude for the opportunity to share our comments on this draft Work Plan.

Sincerely,

Peter Bauer, Executive Director

CC: Antonio Delgado, NY Lieutenant Governor Stacy Lynch, Executive Chamber Elizabeth Fine, Executive Chamber Karen Persichilli Keogh, Executive Chamber Kathryn Garcia, Executive Chamber Melissa Bochenski, Executive Chamber Micah Lasher, Executive Chamber Lonnie Threatte, Executive Chamber Ashley Dougherty, Executive Chamber Basil Seggos, NYSDEC Sean Mahar, NYSDEC Marie Therese Dominguez, NYSDOT Janice McLachlan, NYS DOT Nicolas Choubah, NYSDOT