

Since the Lake Placid Olympics, road salt use in the Adirondack park has been unnecessarily high and local residents have been feeling the effects of the excess sodium chloride. Homeowners have faced challenges with corrosion of vehicles and plumbing, dead trees, and concern for the environment. As concern grows about the long term health of the ecosystem, people defend their homes and properties by taking steps to reduce their own road salt use and fend off the salt with a variety of short term solutions.

This is a collection of stories of Adirondack homeowners sharing how road salt has impacted their lives and what concerns they have for the future.







Salt Stories Keene, NY

Stories from concerned Adirondack residents about personal experiences related to road salt pollution

"My main concerns are the environment in general and also what it's doing to my car.

People don't think about that, but cars don't last long around here because of the road salt. I can't afford to go out and buy a new car every year. I really get bothered when I come to an intersection and you see these big piles of salt. Where the salt truck has stopped, and it hasn't turned off its spreader. I cringe every time I have to drive over that. Modern cars have corrosion resistance. But I buy used cars and when I look under a car I'm considering buying, there's rust. It's inevitable if you buy a car around here. If it's not brand new, it's going to have rust. Right now, I have an old car and it's at the end of life. The reason for that is because it has rust under it. The engine's okay, so is the transmission. But parts are starting to fall off of it because the car is dissolving. That means I have to go out and get another used car and start all over again.

I live opposite the Ausable river, so obviously the runoff is a real issue. I think a lot of times the salt use is indiscriminate. Here in Keene I've seen times when the salt trucks will go out with the least provocation. It will drop below freezing and there is a light little dusting and the salt truck will be out there. The roads are all white with salt. It doesn't seem like it's necessary. Maybe down the road at higher altitudes it is needed but not so much in the flat valleys.

In my own experience, I have a steep driveway and it's a problem for me in the winter. When you get two inches it's not enough to plow. So I shovel it out by hand and when it's really bad I sprinkle calcium chloride on it by hand. It's very expensive but since it's a hill, I cannot let it turn into ice. Even using the calcium chloride concerns me because it is right next to my well because it is considered more environmentally friendly but it is still a chemical that messes with the balance in nature if too much is used. We've tested our well and everything's been good on it except the salt level. The results indicated our salt level to be 21 mg/l which is slightly over the safe limit of 20 mg/l. But I am more concerned going forward because I don't think that is going to get better. **It's only going to get worse in my estimation. And if it's not me, it might be the guy down the street.** Maybe I've just been lucky up to this point.

To address the other main concern, I have not directly observed impacts on the environment but just because I can't see the salt doesn't mean it's not there. When I go swimming in the river, I don't taste saltwater or anything. It's certainly not like that. But I know it's bad and I think about it and I worry about it.

I also wonder, what is the salt doing to the wildlife? **One of the** reasons for being here is the beauty of the Adirondacks and I don't want to see it damaged or the wildlife damaged.

I think it's good that we are thinking about this now because it takes so long to make any kind of change. People in the towns want to be able to be out in their car and get up and go. The town is worried about liability, I'm sure. I think it needs to be measured some way. They get in their routine and they are putting down so many tons of road salt per lane mile. Trying to get them to change is a long and not very easy process."

-Anonymous, July 8, 2020



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Salt Stories Saranac Lake, NY

Stories from concerned Adirondack residents about personal experiences related to road salt pollution

Joe is a teacher in Saranac Lake who has been battling a corroding plumbing system in his home for over the past decade. Joe explains, "We have had a lot of corrosion in our plumbing and we have also noticed the taste of salt in our water years ago. We tested our water and they tested it several times say three or four times that I know of and the results came back with higher levels of salt and then one result came back with an unacceptably high amount of salt. At that point, that was like the first or second test, they said, "Well, we need to do some follow up testing but if this is persistence we would probably pursue some sort of action." In the follow up test, the levels went down again. So it seemed like it wasn't too bad. After that, they told us they weren't gonna to do anything for us."

Around this time more homeowners and advocacy and research groups started noticing the problem with road salt use and Joe participated in a well study with Paul Smith's college. This study concluded that elevated salt levels in private wells was a problem being seen across the Adirondacks. To take action, the group decided to inquire about a class action lawsuit. Joe explains, "we were racking up plumbing bills. Replacing lots of things, water heaters, I had a pump go, our whole well needed to be replumbed, we lost a water storage tank, we were constantly having pipes bursts. I had to install pex tubing for my entire upstairs bathroom. Every year is a new plumbing issue we are constantly trying to stay on top of all of these leaks. And the corrosion that you can see on the plumbing fixtures is very evident. The plumbers pointed it out and said, "yeah, you've got really bad corrosion". We are trying to stay on top of that so we started looking into this lawsuit and we were hoping we weren't going to be the only ones and that dozens of people were going to join in on it. And the lawyer [...] said if we can get a lot of people into this we will have a real case. But only about 8 or 9 people signed up for it and we paid him a few hundred dollars to initiate the lawsuit. But then he came back to us and he said for me to proceed at this point I am going to require thousands more from each of you. Which was too much of a gamble for us to spend that money not knowing what could result."

Since Joe backed out of the lawsuit, corrosion caused leaks and system failures continue to plague his home. Joe continues, "It's starting to be a little overwhelming for me because it seems like each year I am dropping a couple thousand dollars on plumbing or heating or other issues. I can't say definitely, I've got no proof that this is road salt. I've got tests to show that my salt levels started to go up again in 2018 and I thought I noticed salt taste in our water again this year. I was going to do testing in the spring but then the Covid-19 outbreak happened, I just kinda got distracted from it and forgot to test. I feel that the spring is when we really notice the strongest amount of salt in our water. I think that's because that's when the salt runoff from the road gets into our well. And we noticed it and here we are in June and in addition to the radiator I had a sink go on me because of more corrosion issues where it just started leaking and I had to replace it. Two months earlier I remember thinking to myself, It seems like my water is saltier again. [...] I'm gonna have to wait another year. But in the meantime and over the winter I will have more tests just so I can compile more data, look at it, and decide if I have a serious salt problem."

Joe goes on to explain how his day to day has been impacted by road salt. "We don't drink the water at all. We go to get water from a spring. Every couple of weeks we go fill up five gallon jugs of water. We use the water for cooking and showering and everything else and it hasn't been an issue."

Joe continues, "The one thing I don't understand more people aren't upset about is the corrosion caused to vehicles. I usually buy used cars because new cars are so expensive and I look at used cars around New York and they are so rusty. Vermont cars are much better because Vermont uses less salt and more sand. There is far less rust on them. And I talked to my mechanic about this one time and he said, yeah, a lot of guys have their pick up trucks rust out underneath them, especially plow trucks. I just don't understand why more people aren't upset about that. I guess it's a tradeoff because people like to have clear, dry roads to drive on. I feel like there is a lot of damage being done to our vehicles from the excess of road salt. It's reducing the life of everyone's cars when they drive in the Adirondacks."

Joe has been searching for a solution that is guaranteed to work. So far, lawsuits have been a risky investment, and contacting the DOT and state officials has resulted in little change. Joe has even considered installing a new well but again, the investment is still too risky because the well might just turn up with more salty water. In the past three years, Joe has had to dish out thousands in repairs. He describes, "In the past 3 years, I'm looking at a bill for \$2,600 for a new radiator, last year was \$1,200 to re-plumb a bathroom, and the year before that \$2,400 to take care of our pressure tank and well system."

If road salt use continues in the way it does now, Joe is in for a plumbing nightmare. But when asked if he is hopeful that road salt use will decrease in the future, Joe replies, **"Yeah, I'm hopeful."** He continues, **"There are people losing vehicles, there are people concerned about salt increasing in the lakes. It's not just homeowners with plumbing issues, it's affecting more people than that. I think it really does make a difference when they use less salt on our roads."**

-Joe Thill, July 14, 2020



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Salt Stories Lake Placid, NY

Stories from concerned Adirondack residents about personal experiences related to road salt pollution

Larry Master has been vacationing then living in the Adirondack park for 45 years and has seen the park's changes after road salt use was ramped around the time of the Lake Placid Olympics. Since then, Larry faces tree death on his property, fast-corroding cars and concern for the environment.

Larry began, "I vacationed for about 35 years on a house owned by my inlaws in Lake Placid. And then I lived there for ten years. **And as you may know, Mirror lake is one of the most salt-polluted lakes in the Adirondacks.** Our water comes from the town of Lake Placid so we didn't have a well problem like a lot of people in the Adirondacks but we had some salt issues."

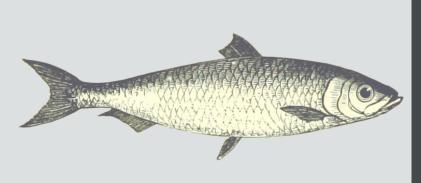
Larry faced issues with salty runoff killing trees on his property. He explains, "Some of the runoff that goes into Mirror lake comes straight from the street and goes through PVC pipes. One of those pipes went right through our property. It sprung a leak at one point and that was probably back ten or twelve years ago. And where the leak sprung, the trees [...] died because of the salt." In addition to the underground water, street runoff is also an issue for Larry. He continues, "water would come down our driveway in a rainstorm and in the winter time it was loaded with salt. And that killed a big hemlock right at the base of the driveway, where it ends.

""Another financial impact has been my cars corroding out from underneath," Larry explains. "One of which was a three year old Prius which I sold. And before I sold it I had to get a bunch of parts underneath the car replaced because of salt damage. I had a previous car, a Toyota van, and right after I sold that the whole left front end fell off and that was all due to salt corrosion. [...] **All of this was started around the time of the Olympics. Before the Olympics, people drove more cautiously, there wasn't all this salt, it was more sand and we didn't have this problem. My cars did not corrode out.** I lived in other states that use salt but nothing like New York. So that was a significant financial impact to me and I talked to other people in the garage and they say the same thing happens to lots of people around Lake Placid because of salt corrosion." Larry explained that he probably will spend between \$400 to \$600 a year trying to keep up with corrosion on his two cars.

Having been a visitor and resident of the Adirondacks for over four decades, Larry has seen the results of the excess salt creep into different aspects of his life. When asked what he is most concerned about if road salt overuse continues into the future, Larry responded, "Mirror Lake. I'm on the Ausable River Association Board. I think this year it turned over but in the past couple years it has not turned over in the Spring like it should have. And **that is a major concern especially for fish like lake trout who have a much narrower band of water that they can inhabit because of the salt"**

Still, Larry is optimistic about the future. Larry mentioned steps the town of Lake Placid and the Ausable River Association are taking with retrofitting plow blades and banning salt use in certain areas. Larry concludes with, "I am really supportive of everyone's efforts to reduce road salt. Getting things back to where they used to be would be great."

-Larry Master, July 14, 2020



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Salt Stories Lake Clear, NY

Stories from concerned Adirondack residents about personal experiences related to road salt pollution

Matt is an Adirondack homeowner with a vacation home on Lake Clear. Matt's cottage is fed from an old well downhill from a busy road that is heavily salted in the winter. The result is salty water and corroding appliances in Matt's cottage.

Matt begins, "We bought a cottage on lake Clear in 2017 and renovated it. I didn't realize how bad the issue was until our first home owner's association meeting, and it might have been that one where Dan Kelting from AWI presented and then we just got involved." He continues, **"Our sodium levels were 169 and then they went up to 186. And you know obviously when you are shooting for 20, that's not great.** To me it tastes like salt water, some people taste it and some people don't, but regardless, that's a lot of sodium. Even if you are not on a low salt diet, it's just too much."

To combat the issue, Matt installed a reverse osmosis system in his home to filter the water coming from his tap. Matt describes his options, **"I don't think I have a choice. I don't think you should be drinking the water the way it is.** The other alternative is bottled water and I didn't quite crunch the numbers that way but it's more so just for the impacts of bottled water versus treating it under the sink and the cost of cartridges. [...] A couple of my neighbors have now installed them. I've been promoting these up and down the boardwalk. To stay away from bottled water. Every is just like, oh, we will just buy bottles of water. But that's a lot of stuff, as far as being trucked in and then the waste after you are done with it so you know, this is something you can handle under the sink at the point of use." Matt explains his water filtering is costing him a couple hundred dollars each year for the system and the filters.

In addition to salt, Matt is concerned about the corrosivity of his water. Matt is lucky he explains, "Because my cottage was completely gutted and redone but we have all plastic pipes, you know it's all pex piping. But there are a lot of cottages here because it's a camp, and you know there is this "it's good enough for camp" idea. Most plumbing is the old copper piping with the lead sweat solder. I would be concerned that the lead is leaching into the water." but even with plastic pipes, appliances are still at risk. Matt says, "I just saw [a hot water heater] **last week where the elements, you know the heating components, were completely eaten through and it was shorting out because it was the electric in contact with the water and it happened in less than five years. It's alarming.**

With this one, the element was replaced and then that was fine but a few weeks later the tank popped, even the metals that create the tank had corroded and failed in five years. I know one that had even corroded in two years." Matt's home is just a vacation home and he is still seeing rapid deterioration of his appliances even with the water off for over half the year.

Matt's reverse osmosis system treats his tap water but does not protect his entire house so it is not a long term solution. Matt has looked into relocating wells but all the wells downhill from the road have turned out to be high in salt. Instead, Matt encourages behavior change and encourages people to expect and embrace bad roads in the winter time. He says, **"It has to be a lifestyle change. You can't drive 55 in the winter, you need to slow down.** The state has to figure out how they can not be liable for accidents. If they can do some law reform to make it so that they don't have to make the roads as if it was some July afternoon and instead like it's the middle of February. I was amazed when we came up here from the Hudson Valley. I thought the winter roads were gonna be treacherous but there was no snow anywhere, all the way through the Cascades. It's just dry, black roads. With a lot of salt on the side of the road."

Even with the challenges Matt has faced with his water, he is still hopeful for a solution. He says, "They had the salt crews there but they are really making an effort. These guys that were just dumping a lot of salt onto the road were amazed to see what just bringing before the storm does. And also those live plows that have a live edge so you can get closer to the road. So now they can scrap closer to the surface. **Hopefully there can be a win-win and a sweet spot in the middle to keep from destroying everything we are supposed to be preserving in the park.**"

-Matt Francisco, July 15, 2020



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