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February 12, 2019

Hon Todd Kaminsky

Chair, Senate Committee on Environmental Conservation

Room 307

Legislative Office Building

Albany, NY 12247

**RE: Testimony of Climate Change and Community Protection Act  
S.2992/A.3876**

Dear Chairman Kaminsky:

The Adirondack Park is the premier natural resource area in New York State and is the place that people across New York and the eastern U.S. depend upon for outdoor recreational experiences. The Adirondack Park has been preserved, expanded and protected through a bipartisan, multi-generational commitment of New York's leaders. The Adirondack Park today is 6 million acres, larger than Vermont or Massachusetts, and contains the 3<sup>rd</sup> largest Wilderness area east of the Mississippi River and nearly 90% of the entire Wilderness lands in the Northeast U.S. Over 2.6 million acres of the 3-million acre public, forever wild Forest Preserve are included within the Park's boundaries.

One does not need to spend much time in the Adirondack Park to see that that climate change is real because we're seeing the impacts in numerous ways. These impacts are changing our lakes and aquatic systems, our forests, and creating many challenges for state agencies and municipalities to manage the Park's municipal infrastructure and deliver municipal services.

**In the winter, it's as likely to rain as it is to snow:** In the Adirondacks we've historically been blessed with six months of winter, November to April. In each of these months we expected frigid temperatures and snow on the ground. In a good year the snow came in October. But we now live in a world where it's as likely to rain as it is to snow in the winter. Long-term predictions state that the Adirondacks in 100 years could have the climate of Raleigh, North Carolina. While summer temperatures have largely been stable, we've seen dramatic changes in average temperatures fall, winter and spring where a warming trend is evident.

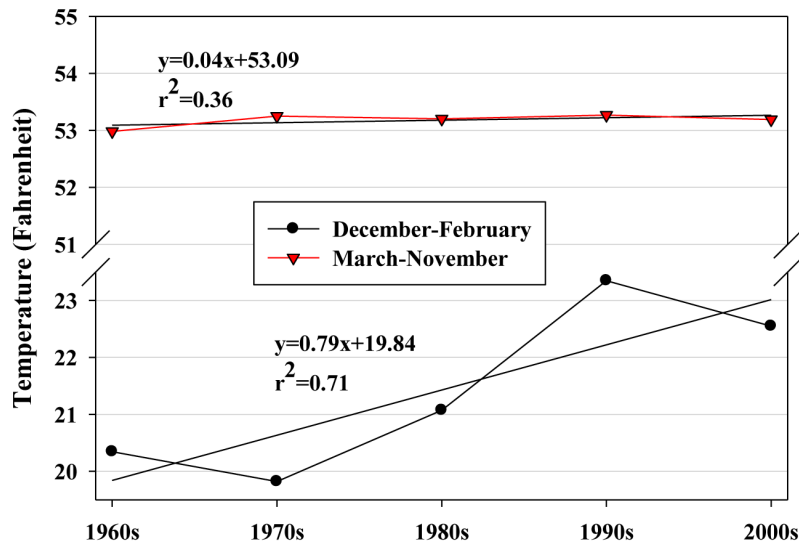
**Protect the Adirondacks**

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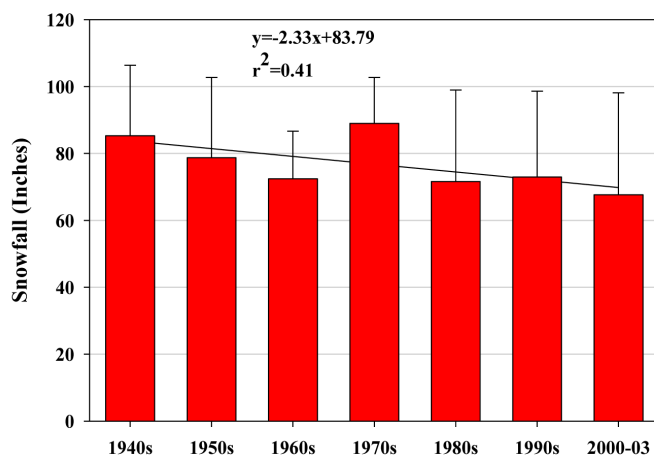
### Average Annual Temperatures (Glens Falls, NY)



A warming trend in winter months means more rain in months when we've historically had snow. This has led to a long-term decline in the average annual snowfall, which has declined by about 20%. We've seen the impacts of uncertain winter as things like snowmobile registrations/sales have declined and small ski areas have closed.

In addition to the fiscal impacts, we've also seen impacts to forest communities where regular freezing-thawing events create real stresses on trees, especially at high elevations, creating higher mortality in some forest communities.

### Average Snowfall (Glens Falls, NY)

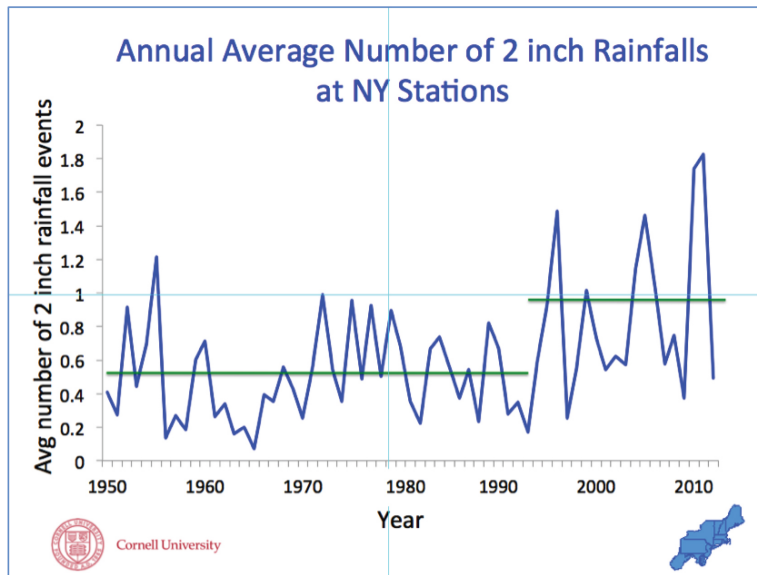


**The Adirondack Park, New York State and Northeast U.S. Are Seeing a 30% Increase in Rainfall:** In addition to a winter where it's as likely to rain as it is to snow, across the Adirondacks, we're also experiencing a 30% increase in the amount of annual rainfall. The general rule in the era of climate change is that wet areas are getting wetter and dry areas are getting drier. We've certainly seen this in any number of locations across the U.S., and especially in New York and the Northeast U.S. This creates many



across New York is that the number of 1 inch and 2 inch storms have increased dramatically. Generally stormwater regulations plans for the first half inch and sometimes for the first inch of rainfall. These systems are overwhelmed by larger storms. What does it mean when larger storms become more frequent and are now the norm?

#### **Increase in Major Storms, 1950-2014**

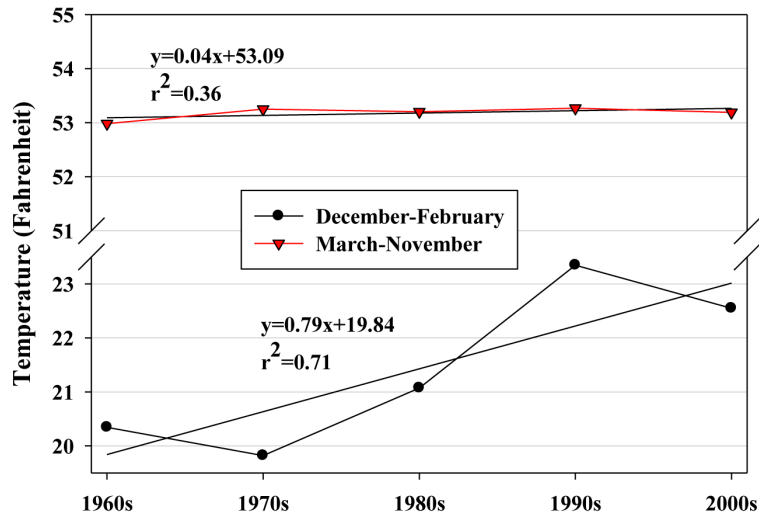


The rise in intensive storm events has created a series of challenges for local highway engineers for management of stormwater and for pedestrian things like culvert size management and road design. Culverts are a vital part of road designs because they allow water to flow in an organized way that does not undermine the design and structure of a road. When culverts across the Adirondacks and New York are routinely undersized and fail due to the new reality of frequent intense storms in the era of climate change, that creates a reality where we're facing enormous costs for retrofits. This is simply an expense that cannot be put off.

**Long-term negative water quality impacts to Adirondack lakes:** The increase in rainfall and intense storms has led to an increase in stormwater pollution. This would be bad enough, and poses a series of major challenges, but the story gets worse because in the era of climate change the problem has been compounded. Stormwater delivers nutrients and pollutants to a lake. The nutrients are largely phosphorus and nitrogen. In artificially high levels loaded by stormwater, these nutrients change aquatic habitats acutely by acting as a massive fertilizer for a lake, which in turn grows more plant life and phytoplankton (microscopic plants), which in turn create more decayed matter and increased biological activity, which creates a chain reaction of ecological changes. Higher higher nutrient loading is a major problem, but this is compounded by higher average lake temperatures.

Across the Adirondacks we're seeing rising temperatures in Adirondack lakes and ponds. This means that the growing season for lakes starts earlier and ends later. The impact is that as lakes are experiencing their highest levels of pollutant and nutrient loading, they now have an even longer growing season to grow even more plants and accelerate ecological processes that lead to declining water quality.

### Long-term Average Annual Temperature, Lake George



Protect the Adirondacks has managed a water quality monitoring program called the Adirondack Lake Assessment Program (ALAP) for the last 22 years with the Adirondack Watershed Institute at Paul Smith's College on more than 75 lakes and ponds across the Adirondacks. This is one of the best long-term water quality monitoring databases not just in the Adirondacks, but anywhere. We've done this because we believe that good data should drive public policy. This program has provided the data that has showed the incredible levels of salt pollution of many leading Adirondack lakes. But the climate change impacts are also significant as we're seeing long-term declines in water transparency, increases in color and chlorophyll-a (algal content).

For many people the extraordinary lakes and ponds of the Adirondack define the Adirondack experience. Abundant lakes, ponds, and rivers underwrite the quality of life in the Adirondacks, tourism, and the viability through local communities due to high shoreline values. Long-term water quality deterioration is a threat to Adirondack communities and the ecologic health of the Park.

**State legislation:** Clearly action is needed now. Warming trends are creating major challenges in the Adirondacks. We've also seen changes to breeding bird and migration patterns. The moose population in the Adirondacks has stagnated, largely due to climate and warmer temperatures. Deep and long freezes in the Adirondacks were one of our best defenses against invasive species and insects, but these defenses are crumbling.

In Governor Cuomo's first term he could not bring himself to say the words climate change. In his second term he played games with and squabbled with federal agencies over the Obama Clean Power Plan, the nation's first national climate change program. Now, in his third term, as political winds have shifted, the Governor says he's all in and has told the world that he plans to launch the Green New Deal-lite here in New York. I don't know where the Governor experienced his conversion, his burning bush moment. Perhaps it was while happily riding a snowmobile that gets 10 miles per gallon on a trail in the Adirondacks.

What we do know is that there are significant climate change programs from both the Executive and Legislature. We find that the proposal by the Legislature is more ambitious and comprehensive and urge leaders to stand firm in their negotiations with the Executive. We need an ambitious plan for New York to put solar on 1 million rooftops, to build 100,000 acres of solar farms, and to embark upon a series of commercial and household energy efficiency standards and retrofits, to get serious about offshore wind, for starters.

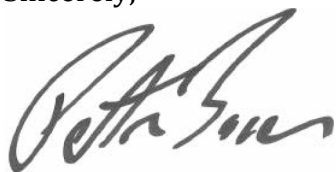
The Climate Change and Community Protection Act creates a partnership with a “Climate Justice Working Group” to work with state agencies on planning and decision making to fight climate change. The bill also amends section 54-1523 of the Environmental Conservation Law to make particular technologies eligible in the NYS Environmental Protection Fund. It also makes other changes to state law to require NYS government agencies utilize renewable energy. The New York State Climate and Community Protection Act also requires a study from the NYS DEC about obstacles in the state that prevent or limit conversion to renewable energy sources. Lastly, this legislation mandates that state agencies must consider climate change and clean energy when reviewing projects and issuing permits.

#### Protect the Adirondacks

Protect the Adirondacks is an IRS-approved non-profit organization dedicated to the preservation and stewardship of the 6-million-acre Adirondack Park. Our mission is to protect the Adirondack Park’s wild character for current and future generations. PROTECT pursues this mission through a combination of advocacy, grassroots organizing, independent public oversight, research, education, and legal action. Protect the Adirondacks was formed in 2009 as a result of a merger between two long-standing environmental conservation groups in the Park, The Resident’s Committee to Protect the Adirondacks and the Association for the Protection of the Adirondacks. Protect the Adirondacks is managed by a 21-member Board of Directors of Adirondack leaders in state agency management, environmental law, local government, Adirondack environmental and cultural history, and small business. Protect the Adirondacks maintains an office in a 100% energy efficient, solar- and wind-powered office in Johnsburg in the central Adirondacks.

On behalf of the Board of Directors of Protect the Adirondacks, please accept my gratitude for the opportunity to present our concerns about vital climate change legislation.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Bauer", with a stylized, flowing script.

Peter Bauer,  
Executive Director