



Testimony of Parks & Trails New York
to the Assembly Standing Committee on
Environmental Conservation

Hearing on the
Environmental Causes and Effects
of Extreme Weather Events

*Respectfully submitted via email by
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Chairperson Sweeney and members of the Committee, thank you for this opportunity to provide input on potential actions to mitigate the man-made factors that contribute to extreme weather events and thereby reduce the environmental impacts of such events.

Parks & Trails New York is the only statewide nonprofit organization working to expand, protect and promote a network of parks, trails and open space throughout New York State. We have been the State's leading advocate for parks and trails for more than 25 years and are dedicated to improving our health, economy, and quality of life through the use and enjoyment of green space. We have worked with hundreds of community organizations and municipalities to envision, create, promote, and protect a growing network of parks and more than 1,500 miles of greenways, bike paths, and trails throughout the state. These facilities are a significant part of our infrastructure and should be considered as valuable assets when planning for a sustainable future.

At the outset, we wish to commend the Committee and Governor Cuomo for recognizing the need to do long-term planning for climate change and the increased frequency and severity of storm events which might afflict New York State as a result.

The Problem

The storms of 2011 and 2012 (Irene, Lee and Sandy) demonstrated our vulnerability to weather-related disaster. While high-velocity winds caused much damage to our communities, large volumes of water from run-off and coastal storm surges had catastrophic impacts on roads, mass transit facilities, utilities, homes and other buildings.

While there will always be a role for flood gates, sea walls, levees, jetties and other man-made physical barriers, these will not always be enough to provide the resiliency needed to mitigate the effects of more frequent and severe natural disasters and provide better assurance for long-term community sustainability.

It is very expensive to construct artificial barriers, and they reduce the utility, and interfere with other valuable functions, of the lands they occupy. Resources that could be applied to more productive uses are diverted to a single and static purpose and locked up.

Recommendations

1. Use Natural Systems.

Natural systems should be employed to dissipate storm surges, absorb and disperse floods from high precipitation events, and buffer buildings near waterfronts or at low elevation. Properly located, constructed and maintained public parks and trails can provide natural protective systems while keeping the lands they occupy in productive, attractive use. Therefore, restoring existing park and trail systems and designing new parks, trails and greenways as an integral part of protective systems and facilities should be a major strategy in protecting other infrastructure systems and the rest of the built environment from future significant storms.

2. Provide Transportation Alternatives

Transportation systems should be designed and constructed to provide multiple modes for the movement of people to provide options in the event of emergencies. Reliance exclusively on motorized transport is unworkable given the vulnerability of vehicular traffic control systems, mass transit networks, and motor fuel delivery and distribution to natural disasters. The extensive bicycle network and vast pedestrian amenities recently implemented by New York City better

equipped NYC residents and workers to safely and efficiently travel throughout the five boroughs in the absence of transit and the presence of gridlock in the aftermath of Superstorm Sandy. The Thursday after the storm, 30,000 cyclists crossed the East River bridges, 230% more than on a normal day. Therefore, to preserve the ability for people to safely get to work, school and shops when storms interrupt motorized transport, especially in dense urban areas, walkways and bicycling infrastructure should be a mandatory component of our transportation modalities and not just an optional amenity.

3. Get Ancillary Benefits

Unlike single-purpose physical barriers, parks and trails and transportation alternatives employed as part of a comprehensive resiliency strategy can provide us with a host of other benefits at almost no extra expense. These include:

- Making our State more attractive to knowledge workers and the high value-added businesses they staff;
- Providing jobs and other economic opportunities from park and trail related tourism, the fishing industry and related businesses;
- Improving the health and day-to-day quality of life for park and trail users;
- Reducing annual expenditures for drinking water purification and waste water treatment; and
- Creating wildlife corridors to help preserve healthy ecosystems.

4. Reduce Greenhouse Gas Emissions

Our State should act with long-term resiliency and sustainability in mind. We believe that climate change—which is creating higher ocean levels and more frequent and severe storms—is in large part the result of the addition to the atmosphere of greenhouse gases from human activities. While New York alone cannot change the course of natural history, it must not make things worse and should regard the reduction in emissions of greenhouse gas as its duty. The park, trail and transportation recommendations we make above will also help us live up to this duty: more trees in more parks provide a natural form of carbon sequestration; open spaces, trails and greenways, as part of natural buffering and water dispersal zones, moderate temperatures from the urban heat island effect; and safe multi-use trails and street network infrastructure that encourage walking and bicycling for transportation reduces the combustion of fuels which emit greenhouse gases.

Safe, off-road multi-use trails and street network infrastructure that encourages bicycling and walking for transportation can have a direct impact on greenhouse gas emissions. With an average fuel efficiency for U.S. automobiles of 20.5 mpg¹, and with every gallon of gas emitting 19.643 lbs of CO₂², then, for every mile biked or walked instead of driven, approximately 1 lb of CO₂ is kept from entering the atmosphere. Walking and biking currently yield greater CO₂ reductions than other popular solutions like hybrid cars.

Parks are also essential partners in active transportation, providing connection points to trails among and between communities. Increased connectivity can provide continuous and more direct routes for travel by walking and biking.

Whether in parks or as part of tree canopies in developed areas, trees provide a natural form of carbon sequestration. Land-use management techniques and forestry activities in 2010 resulted in an offset of approximately 15.4% of total U.S. CO₂ emissions.³

In cities, parks and natural areas directly mitigate climate change by moderating temperatures from the urban heat island effect.

Closing

As the Assembly works with the Senate and the Governor on the State Fiscal Year 2013-2014 budget, we encourage you to consider investments in natural systems—in particular its state and local parks and trails—as opportunities to keep people working to help grow the state’s economy sustainably and better protect and prepare New York’s communities from the impacts of climate change and severe weather events.

Parks & Trails New York looks forward to working with this Committee, the rest of the Legislature, the Governor, our partner organizations, and park and trail groups to make New York State a leader in sustainability efforts.

Thank you again for the opportunity to provide input.

¹ Staniford, S. *US Fleet Fuel Economy*. Retrieved July 30, 2012, <http://earlywarn.blogspot.com/2011/05/us-fleet-fuel-economy.html>.

² Voluntary Reporting of Greenhouse Gases Program Fuel Emission Coefficients. U.S. Energy Information Administration. Retrieved July 30, 2012, from <http://www.eia.gov/oiaf/1605/coefficients.html>.

³ Land Use, Land-Use Change, and Forestry. EPA. Retrieved June 22, 2012, from <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2012-Chapter-7-LULUCF.pdf>.