New York's plan to enhance the pilot monitoring project to inform the next review of the secondary standards for oxides of nitrogen and sulfur

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The US EPA's development of the aquatic acidification index (AAI) to address the secondary national ambient air quality standards for oxides of nitrogen and sulfur was a novel multi-pollutant, multi-media approach to air quality management. Although the Agency chose to retain the current standards until the next round of review, the final rule calls for a pilot monitoring program in 3-5 sensitive ecoregions across the country to evaluate Federal Reference Methods for sulfur and nitrogen oxides, dry deposition measurements and algorithms, and ultimately the usefulness of the AAI to protect public welfare. The Adirondack Mountain region in northern New York, which has been impaired by acid deposition and has a long record of air, deposition and water quality data which were used to help develop the AAI, was selected as one of these sensitive ecoregions. The US EPA plans to augment current wet (NADP/NTN) and dry (CASTNet filter pack, CFP) deposition measurements at Huntington Wildlife with a passive NH3 sampler and a continuous NOy analyzer. The New York State Department of Environmental Conservation (NYSDEC) and partners plan to enhance the pilot monitoring efforts by supporting CFPs and passive NH3 at two additional wet deposition sites in the Adirondacks. The first site – Moss Lake – is in the southwestern part of the Adirondacks, a region with many lakes and streams still impacted by the effects of acid deposition. The other site – Whiteface Mountain – is in the "High Peaks" region with a wealth of co-pollutant data, including cloud chemistry data, PM2.5 mass and speciation, and continuous SO2. The NYSDEC also plans to transition its own wet deposition samplers to NADP/NTN samplers to provide additional information in and around the Adirondack region. These enhanced monitoring efforts will provide additional spatial information to better evaluate the variability of deposition and the AAI across the region.

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