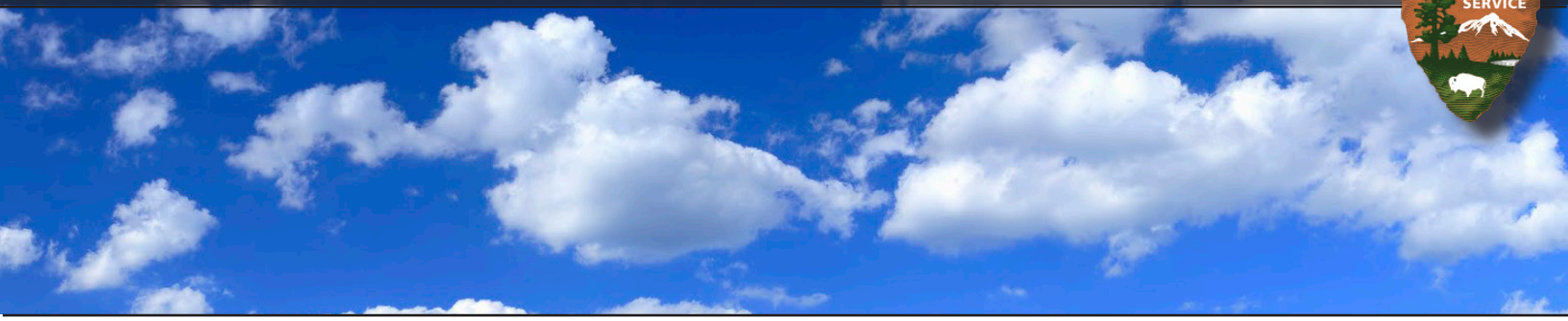
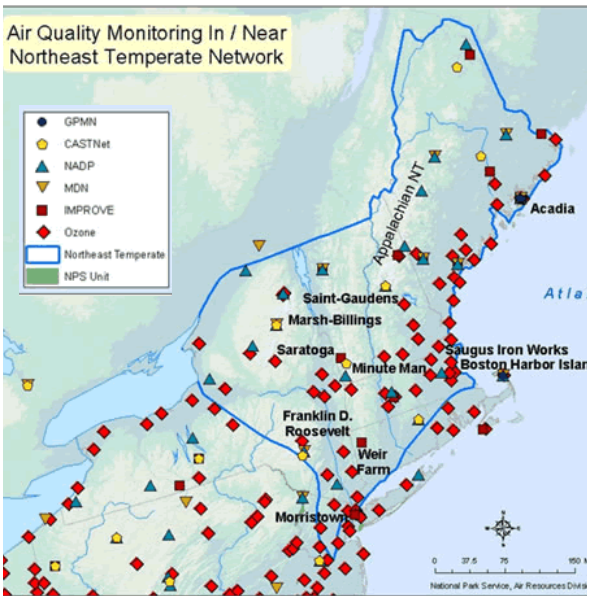


Air Quality

Northeast Temperate Network Program Brief

Right: Air quality monitoring stations simimlar to this one in Great Smoky Mountains NP are in more than 70 parks across the country. NPS photo.

Below: Air quality monitoring in or near the network is indicated on the map by symbols, with the blue line showing the approximate borders of the network. The legend shows the symbols for the type of monitoring present, with NPS park units in green. NPS photo..



Air quality is important for human health and natural resources alike. Air pollution includes gases and particles in the air that are emitted by power plants, factories, automobiles, and other sources. This can have serious effects on air quality, wildlife, vegetation, lakes, streams, soils, and visibility. Air pollution can come from local sources or may be transported long distances, even internationally, by winds.

Why monitor air quality?

Air pollution impacts all National Parks.

Air quality standards are a challenge for the NPS as a whole, who's mission is in part to manage and protect resources unimpaired for the enjoyment of future generations. Understanding where air pollution comes from, what it is made of, and how it affects parks and park resources is one of the keys to protecting parks nationwide. Atmospheric deposition is the process by which airborne particles and gases are deposited to the earth's surface either through precipitation (rain, snow, clouds, and fog) or as a result of complex atmospheric processes such as settling, impaction, and adsorption, known as dry deposition.

The NPS has an affirmative responsibility under the Clean Air Act to protect parks and their resources from sources of air pollution and to participate in national and regional initiatives to control air pollution.

How is the monitoring done?

There are air/climate monitoring stations either in or near NETN parks.

Except for Acadia NP and Saratoga NHP, network parks have no on-site ambient air quality monitoring stations, but most of the others have nearby monitors. The air pollutants of significant interest for NETN are ozone and acidic deposition. At Acadia, visibility impairment and mercury deposition are also of concern. Seven of the parks, plus parts of the Appalachian National Scenic Trail (NST), are in designated ozone nonattainment areas. An ozone injury risk assessment indicates the risk of injury is moderate to high in seven of the NETN parks, plus along a significant section of the Appalachian NST.

How is the information delivered to parks?

The NPS ARD leads the way.

The NPS Air Resources Division has taken the lead on air resource monitoring and reporting. Refer to their website for the latest reports and information.

More information:

For access to the full monitoring protocol, resource briefs, maps, and more - visit NETN's website and navigate to the Air Quality webpage.

Northeast Temperate Network
54 Elm Street, Woodstock, Vermont 05091
802-457-3368
http://go.nps.gov/netn

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