

GREENWorks

Ideas for a Cleaner Environment

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Clearing Regional Haze from Our Summer Vistas

As we spend more time outdoors in the summer, we are reminded of New Hampshire's beautiful natural environment and the lovely vistas we enjoy. Healthy air and clear views are part of that environment. Sometimes, however, there is trouble on the horizon: the horizon is a little hard to see. The problem is regional haze – veils of air pollution that on some days obscure the views of mountain ranges, skylines and sails on the water.

The range for visibility under natural conditions on a clear day in the Eastern United States can be greater than 100 miles, but under polluted conditions, this range is limited to 40 – 60 miles or less. Often mistaken as fog, some haze occurs naturally, but most often haze is the result of human activity. Emissions from power plants, factories, cars, and trucks combine with moisture in the air to form very small particles that block sunlight and reduce visibility. Haze can form any time of the year and can cover a region of several hundred miles.

If you can see haze on the horizon, chances are the particle pollution is in the air right where you are. Some of the pollutants that lead to regional haze have also been linked to serious health and environmental problems. Very small particles are most likely to travel deep in the respiratory system and be deposited deep in the lungs, where they can become trapped on membranes. Exposure to elevated levels of fine particles can increase the likelihood of respiratory symptoms in sensitive individuals, aggravate heart or lung disease and cause premature mortality in the elderly and persons with cardiopulmonary disease.

In the environment, fine particle pollution contributes to acid deposition (rain), leading to adverse environmental impacts such as increased mortality among sensitive plant and animal species, stunted forest growth, and damaged soil. Changes in the acidity of lakes and streams can impact the survival of fish and amphibian populations by impairing the ability of certain fish and aquatic plants to reproduce, grow, and ultimately survive. In New Hampshire, 19 lakes have a pH less than 5.0 and consequently have no naturally reproducing fish populations due to acid deposition. An additional 95 lakes have a pH less than 6.0 and show signs of sensitive species disappearing.

Regional haze demands regional solutions. New Hampshire is a member of a regional planning organization called MANE-VU – the Mid-Atlantic/Northeast Visibility Union – whose purpose is to coordinate efforts to reduce haze and improve visibility in selected national parks and wilderness areas. The MANE-VU region includes two areas in New Hampshire: Great Gulf Wilderness Area and Presidential Range - Dry River Wilderness Area. The goal of MANE-VU is to meet the requirements of EPA's 1997 regional haze rules under the Clean Air Act.

Individuals make choices every day that can make a real difference in reducing the particle pollution that causes haze, contributes to acid deposition, and causes health problems:

- Use energy-saving appliances and turn off lights.
- Maintain cars and trucks properly to ensure that they are running clean and efficiently.
- Take public transportation, carpool, walk, or bike.

Become informed and get involved. Decisions your local, state, and federal representatives make can and do have an impact on air quality.

For more information on haze, what is being done, and how you can help, visit www.manevu.org. For more information on air quality issues in New Hampshire, call the NHDES Air Resources Division at (800) 498-6868 or visit www.airquality.nh.gov.