

NATURAL RESOURCES PRESERVATION BRIEF #9

VISIBILITY

The Air Quality Division, Denver, in cooperation with the Resources Management Staff recently prepared an interpretive poster which addresses air pollution from a visibility perspective. The poster will be placed in the Visitor Center.

Air Pollution

Air pollution is generated by numerous human activities and natural processes. Obvious sources are automobiles and power plants. Less obvious sources are heating with wood, driving on a dirt road (dust), and natural phenomena, like volcanoes. Pollution also results in a variety of impacts. Gasses and particulate matter affects the ability of biological organisms, including people, to breath and transpire. Some substances are corrosive and others change the chemistry of soils and water. Pollutants also decrease visibility.

Visibility

The most dramatic affects on visibility are usually seen in the Southwest where the air is particularly clean and power plants generate plumes of smoke. Because the air quality of the eastern seaboard is degraded and expansive vistas, similar to those of the West, are not common, visibility is not usually given much attention. This is unfortunate because there are some locations where the ability to see long distances enhances one's life.

Here at Antietam, visibility, particularly of South Mountain, is significant in completing the story of fighting in this region.

Useful Facts

The photographs on the visibility poster illustrate good, average and poor visibility conditions which occurred during the fall of 1984. Existing conditions vary according to different seasons and geographical regions. Regionally, the best visibility is found in the Southwest where the average visibility is 110 kilometers (68 miles) and on occasion reaches 250 kilometers (155 miles). Throughout the remainder of the West the visibility varies from an average of 25 kilometers (16 miles) in the Pacific Northwest to an average of 72 kilometers (45 miles) in the Northern and Central plains. East of the Mississippi and south of the Great Lakes the average visibility is less than 24 kilometers (15 miles). Seasonal variation of visibility conditions show that in the East, high humidity mixed with pollutant emissions from urban areas causes a decrease in visibility. During the summertime the visibility in the East will decrease to 13 to 16 kilometers (8 to 10 miles).

Natural Resources Management Staff

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