

Columbia Gorge Air Quality Strategy Report



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Department of
Environmental
Quality

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Overview

The Oregon Department of Environmental Quality (DEQ) and Southwest Clean Air Agency (SWCAA) developed an air quality strategy report addressing visibility and other air quality concerns in the Columbia River Gorge National Scenic Area. The strategy report summarizes the conclusions of a multi-year air quality study conducted by the air agencies, and describes a variety of current, new, and possible future emission reduction strategies that will continue to improve visibility in the Gorge. The agencies' final strategy report will be provided to the Columbia River Gorge Commission in September 2011.

Air Quality Study

From 2004-2008 SWCAA and DEQ conducted an air quality study to characterize and identify local and regional emission sources contributing to haze pollution in the Gorge. Haze pollution degrades our ability to view and enjoy scenic vistas, especially in wilderness areas like Mt. Hood or Mt. Adams, national parks, and special scenic areas like the Gorge. The agencies also looked at regional growth projections, and estimated future trends in Gorge haze and visibility. The agencies' study involved national experts in haze and visibility.

The agency's study provided important information on haze impacts in the Gorge, and supplemented Oregon's 2009-2011 regional haze plan which included rules requiring significant emission reductions and ultimate closure of the PGE Boardman coal-fired power plant.

Science Conclusions

The agencies' study taught us several important facts about haze in the Gorge.

- Current haze levels in the Gorge are not getting worse in spite of regional growth pressures.
- Haze levels and visibility in the Gorge are expected to continue to improve slightly over the coming decade.
- Gorge haze comes from all over the Pacific Northwest; including both local sources, and those as far away as Canada and overseas. Both "man-made"

and natural sources (like wildfires and vegetation) contribute to haze pollution.

- Generally, each "man-made" emission source (such as motor vehicles, power plant emissions, and woodstoves) contributes a relatively small amount to total haze pollution. High haze events in the Gorge occur in both summer and winter, and result from the collective contribution of many different natural and "man-made" emission sources across the region.
- The PGE Boardman coal-fired power plant is the largest individual contributor to haze pollution in the Gorge.
- Haze reduction will come over time as many different strategies across the region act together to reduce emissions.

Strategy Report

The strategy report focuses on implementing requirements of the federal Regional Haze Program as the vehicle and framework for improving visibility in the Gorge. The federal Regional Haze Program establishes mandates, benchmarks and timelines to improve visibility across the region and in the Gorge.

The strategy report also describes a suite of existing and new emission reduction actions and programs that will help improve visibility in the region. Some of these actions include:

- Shutdown of PGE Boardman by 2020.
- Federal requirements for haze reduction in wilderness areas like Mt. Hood and Mt. Adams.
- Clean car emission standards in Oregon and Washington.
- Cleaner diesel fuel standards.
- Cleaner engine standards.

Special Issues of Concern

There are several issues of special concern to Gorge area residents and concerned citizens.

Balance: The National Scenic Area Act calls for the protection and enhancement of scenic,

natural, recreational, and cultural resources in the Gorge in a way that also protects local Gorge economies and communities. New air quality strategies developed for the Gorge must keep this balance in mind.

Risks to Natural and Cultural Resources: The U.S. Forest Service (USFS) and Gorge-area Native American Tribes have begun important research into the question of acid deposition in the Gorge and the potential risk to important cultural and ecosystem resources. DEQ and SWCAA encourage the USFS and Tribes to continue this important research. Several additional studies will be needed before definitive conclusions can be drawn about the risk to cultural and natural resources from acid deposition.

Many of the same pollutants that cause haze also contribute to acid deposition. Therefore, many of the upcoming strategies to reduce haze will also help reduce acid deposition in the Gorge and reduce risks to cultural and natural resources.

PGE Boardman Coal-Fired Power Plant: Many citizens were concerned that air emissions from the Boardman facility are affecting the Gorge. The Boardman power-plant, along with several other older industrial facilities in Oregon and Washington, were evaluated for emission control options as part of the federal regional haze program.

In December 2010, DEQ adopted rules that ensure the permanent closure of the Boardman coal fired boiler no later than December 31, 2020. The rules also require pollution controls to be installed that would reduce haze forming emissions by 48 percent in the 2011 to 2019 timeframe and eliminate these pollutants completely after closure.

Emission reductions at the Boardman facility will help improve visibility in the Gorge and help reduce acid deposition. This will in turn help reduce the risk to scenic, recreational, natural, and cultural resources in the Scenic Area.

Summary

The air agencies have developed a strategy for reducing haze-forming pollution in the Columbia River Gorge. This strategy is based on the air agencies' understanding that both local and regional air pollution sources influence Gorge haze and that reduction of haze can be most effectively achieved through the implementation of the federal Regional Haze Program. The regional haze program establishes enforceable

mandates, benchmarks and timelines to improve visibility across the region.

This strategy, in combination with the associated Gorge visibility study, completes the charge given by the Gorge Commission. The Gorge visibility study provides a comprehensive understanding of the local and regional emission sources that influence scenic resources in the Gorge. The strategy document also describes the many state and federal emission reduction strategies currently working to reduce haze pollution across the Pacific Northwest, and provides a look into the likely future of haze trends in the Columbia River Gorge National Scenic Area, and a path forward for continued visibility improvement over time.

DEQ and SWCAA are grateful to the scientists, state and federal agencies, elected officials, Tribes, stakeholders and members of the public who have offered their thoughts and recommendations. DEQ intends to update Oregon's regional haze plan in the 2013-2015 timeframe. If the air agencies find that Gorge haze levels are increasing, the air agencies will investigate the reasons and will consult with the Gorge Commission to discuss possible remedies.

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More information about the Gorge air quality project, Air Quality Study, and Gorge Air Quality Strategy Report can be found online: <http://www.deq.state.or.us/aq/gorgeair/>

Alternative formats

Alternative formats (Braille, large type) of this document can be made available. Contact Oregon DEQ's Office of Communications & Outreach, Portland, at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696.

