



FRIENDS OF THE COLUMBIA GORGE

Via email

March 19, 2019

Senate Committee on Environment and Natural Resources
900 Court St. NE
Salem, Oregon 97301
senr.exhibits@oregonlegislature.gov

Re: SB 103, SB 104, and SB 876

Dear Chair Dembrow and committee members:

Friends of the Columbia Gorge (Friends) has reviewed and submits these comments on SB 103, SB 104, and SB 876. Friends is a non-profit organization with approximately 7,000 members dedicated to protecting and enhancing the resources of the Columbia River Gorge. Our membership includes hundreds of citizens who reside in the six counties within the Columbia River Gorge National Scenic Area.

The Columbia River Gorge National Scenic Area is already severely impaired by air pollution, especially nitrogen oxides (NO_x), sulfur dioxide (SO₂), and particulate matter – all of which are emitted in large amounts by mega-dairies. A 2005 joint study by the U.S. Forest Service and National Park Service targeted federally managed areas around the West and found that the Columbia River Gorge National Scenic Area and Sequoia National Park had by far the worst “annual standard visual range[s]” of the twelve areas.¹ Similarly, a 2000 Forest Service study of air quality monitoring data from 39 federally managed “visibility protected” areas in the West found that the Scenic Area has “the highest levels of haze” and “the sixth worst visibility pollution of these areas.”² Gorge air quality has been monitored for the last twenty years. The Forest Service has

¹ Mark Fenn, USDA Forest Service et al., *Why federal land managers in the Northwest are concerned about nitrogen emissions*, at 10 (Dec. 2004).

² Arthur Carroll, USDA Forest Service, Letter to Columbia River Gorge Commission, at 3 & attach. 3 (Feb. 7, 2000).

documented that visibility impairment occurs on at least 95% of the days that have been monitored.³

Deposition of pollutants also has profound negative impacts on ecosystems. Studies demonstrate that in the Western United States, some aquatic and terrestrial plant and microbial communities are significantly altered by nitrogen deposition.⁴ Sulfur and nitrogen concentrations in lichen tissue found in the Gorge are comparable to those found in lichen tissue sampled in urban areas. Nitrogen deposition rates in the Gorge are comparable to the most polluted areas in the United States.

Particulate matter pollution also threatens human health and welfare. In fact, when reviewing the National Ambient Air Quality Standards for PM_{2.5}, the EPA found that there is no level of particulate matter pollution at which there are no human health effects. According to the EPA, fine particulate matter pollution causes a variety of adverse health effects, including premature death, heart attacks, strokes, birth defects, and asthma attacks.⁵ Even low levels of PM_{2.5} can cause low birth weights, damage lung function, and increase risks of heart attack and premature death. Studies reviewed by EPA revealed a linear or almost linear relationship between diseases like cancer and the amount of fine particulate matter in the ambient air.⁶ Consequently, particulate matter contamination has adverse health effects at any concentration.

The Management Plan for the National Scenic Area requires that “air quality shall be protected and enhanced, consistent with the purposes of the Scenic Area Act.” NSA Management Plan at I-3-32–33. Pursuant to this requirement, the Gorge Commission approved the *Columbia River Gorge Air Study and Strategy* (Sept. 2011). It summarizes the existing science on air quality impacts, adopts thresholds for significant impacts to visibility, and adopts an overall goal of “continued improvement” in visibility in the National Scenic Area. In addition, guidance documents prepared by Federal Land Managers provide methodologies and thresholds for evaluating air pollution impacts to sensitive federal lands in both Class I and Class II areas.⁷ The Forest Service has been monitoring lichen and air quality throughout the National Scenic Area.⁸ Since thresholds for significant adverse impacts have already been exceeded for particulate matter and nitrogen deposition, any significant additional source of pollutants will likely contribute to

³ Robert Bachman, USDA Forest Service, *A summary of recent information from several sources indicating significant increases in nitrogen in the form of ammonia and ammonium nitrate in the Eastern Columbia River Gorge and the Columbia Basin*, at 2 (June 24, 2005).

⁴ See Mark E. Fenn, et al, *Ecological Effects of Nitrogen Deposition in the Western United States*, *BioScience* Vol. 53:4, Apr. 2003, available at <http://www.bioone.org/doi/abs/>

⁵ 71 Fed. Reg. 2620, 2627–36 (Jan. 17, 2006).

⁶ *Id.*

⁷ The Federal Land Managers have adopted the following guidance documents that can be used to evaluate air pollution impacts to the Columbia River Gorge: *Federal Land Managers' Air Quality Related Values Work Group (FLAG) Phase 1 Report—Revised* (2010) and *Federal Land Managers' Interagency Guidance for Nitrogen and Sulfur Deposition Analyses* (2011). These reports are available at <http://www.nature.nps.gov/air/permits/flag/>.

⁸ The Forest Service maintains a database of all lichen/air quality monitoring sites at <http://gis.nacse.org/lichenair/index.php?page=query&type=community>.

cumulative significant adverse impacts to Gorge resources. Nitrous oxides are major components of haze pollution that affect the Columbia River Gorge National Scenic Area. They also contribute to acid rain, which threatens ecosystems and Native American rock paintings.

Mega-dairies in the Boardman area east of the National Scenic Area are already contributing to the air quality issues in the Gorge. Any additional mega-dairies in this area, including reopening the Lost Valley Ranch site, would further degrade the scenic, natural, cultural, and recreation resources of the National Scenic Area. While SB 876 would enact modest reforms, it does not address the air quality issues associated with mega-dairies. Friends asks you to pass SB 103, instituting a moratorium on mega-dairies in Oregon until adequate regulations are adopted in Oregon to prevent harm to neighbors, communities, and the protected resources of the Gorge.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. McCoy', with a stylized flourish at the end.

Steven D. McCoy
Staff Attorney