
Date: Jan. 6, 2021
To: Environmental Quality Commission
From: Richard Whitman, Director
Subject: Item E: Regional Haze Program Update (Informational)
Jan. 21-22, 2021, EQC meeting

Why this is important

EPA adopted the Regional Haze Rule in 1999 to improve and protect visibility in 156 national parks and wilderness areas across the country. This rule requires states to adopt regional haze plans and provide updates to these plans every 10 years. EQC adopted the first Regional Haze Plan in 2009 and DEQ is in the process of developing the plan for the second 10-year regional haze planning period, 2019-2028. Development of the plan must include numerous consultations with tribes, federal and local governments, and affected stakeholders. DEQ must submit its updated plan to EPA by July 31, 2021.

DEQ will inform the commission about:

- Visibility conditions in Oregon's 12 Class 1 Areas
- Progress on stationary source screening and analysis for controls
- Mobile and area sources
- Consultations and outreach
- Potential environmental justice benefits
- The timeline to July 31, 2021

Prior EQC involvement

The initial 2009 Regional Haze Plan included:

- A comprehensive review of visibility conditions in each of Oregon's 12 Class 1 Areas with a projection of statewide emissions and visibility conditions in 2018,
- A summary of DEQ's Best Available Retrofit Technology, evaluation of the PGE Boardman coal-fired power plant and other sources potentially subject to BART, and
- A reasonable progress demonstration for the best (clearest) and worst (haziest) visibility days, related to the 2018 milestone benchmark.

In 2010, DEQ updated the Regional Haze Plan to incorporate rules that included new emission controls for PGE Boardman.

In 2017, EQC approved the Regional Haze Five-year Progress Report, with updates and minor revisions to the Regional Haze Plan and State Implementation Plan. DEQ records Regional Haze Plan updates and report submissions as SIP revisions.

DEQ last presented to EQC on this topic in November 2019 to describe the start of the Regional Haze planning effort. This informational staff report describes updates to monitoring data, visibility projections, DEQ's long-term strategy, environmental justice benefits, and consultations and outreach.

Background

The federal Regional Haze Rule requires states to address visibility protection for regional haze in Class 1 Areas in each state. In Oregon, there are 12 mandatory federal Class 1 Areas, including Crater Lake National Park, and 11 wilderness areas. Oregon includes the Columbia River Gorge National Scenic Area in the state's regional haze analyses. EPA requires states to adopt regional haze plans that would improve Class 1 Area visibility on the most impacted days – the worst 20 percent with some proportion of wildfire-impacted days removed – and ensure no degradation on the clearest days over the next 60 years. The goal of the Regional Haze Rule is to return visibility in Class 1 Areas to natural background levels by the year 2064. Figure 1, included in Attachment A, shows the location of these areas and monitors.

Under the federal Regional Haze Rule, states are required to develop five-year progress reports showing the latest visibility trends analysis and the current status for meeting reasonable progress milestones since the last submission of the plan. The 2017 progress report summarized changes in monitoring and emissions data since the plan was last adopted in 2010 and evaluated the adequacy of the current State Implementation Plan to meet the progress goals. The 2017 report concluded that visibility was continuing to show positive improvement, the plan was meeting the reasonable progress milestones, and no substantive revision was needed at the time. Figure 2, in Attachment A, compares visibility nationally during the first planning period.

The federal Regional Haze Rule requires states to update their Regional Haze Plans every 10 years. The revised plan must show how the state will continue to implement its plan to reduce haze, while meeting both short-term and long-term progress goals to achieve natural visibility conditions by 2064. It requires states to consult with federal land managers during the plan development process.

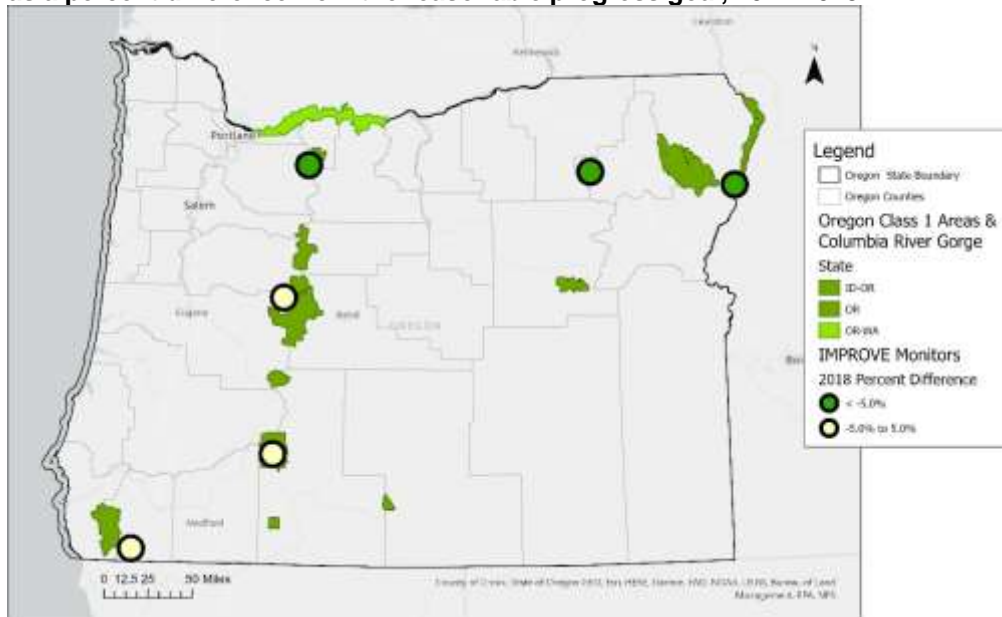
Oregon's revised Regional Haze Plan will include the following key requirements:

- Calculations of visibility conditions in each of Oregon's 12 Class 1 Areas
- Long-term strategy for regional haze
- Reasonable progress goals

Calculations of visibility conditions in each of Oregon’s 12 Class 1 Areas
DEQ must conduct a comprehensive review and technical assessment of visibility conditions in each of Oregon’s 12 Class 1 Areas, showing major pollutants and source categories in Oregon and other states causing haze, and a projection of visibility.

Based on the EPA’s corrected data release in June 2020,¹ Figure 3 (below) shows the visibility at the 6 IMPROVE monitors that cover the 12 Class 1 Areas in Oregon for the period from 2014-2018, for the most impaired days, as a percent difference from the 2018 reasonable progress goal. In 2018, three monitors in light yellow (KALM1, CRLA1, and THSI1) in the southern part of the state are within five percent above or below the reasonable progress goal, “on the glidepath.” In 2018, all of these monitors are meeting the reasonable progress goal, but just barely. These three monitors cover eight Class 1 Areas: Kalmiopsis Wilderness, Crater Lake National Park, Diamond Peak Wilderness, Mountain Lakes Wilderness, Gearhart Mountain Wilderness, Three Sisters Wilderness, Mount Jefferson Wilderness, and Mount Washington Wilderness. The other three monitors in green (MOHO1, STAR1, and HECA1), are greater than five percent below the reasonable progress goal, or “below the glidepath.” They cover four Class 1 Areas: Mount Hood Wilderness, Strawberry Mountain Wilderness, Eagle Cap Wilderness, and Hells Canyon Wilderness.

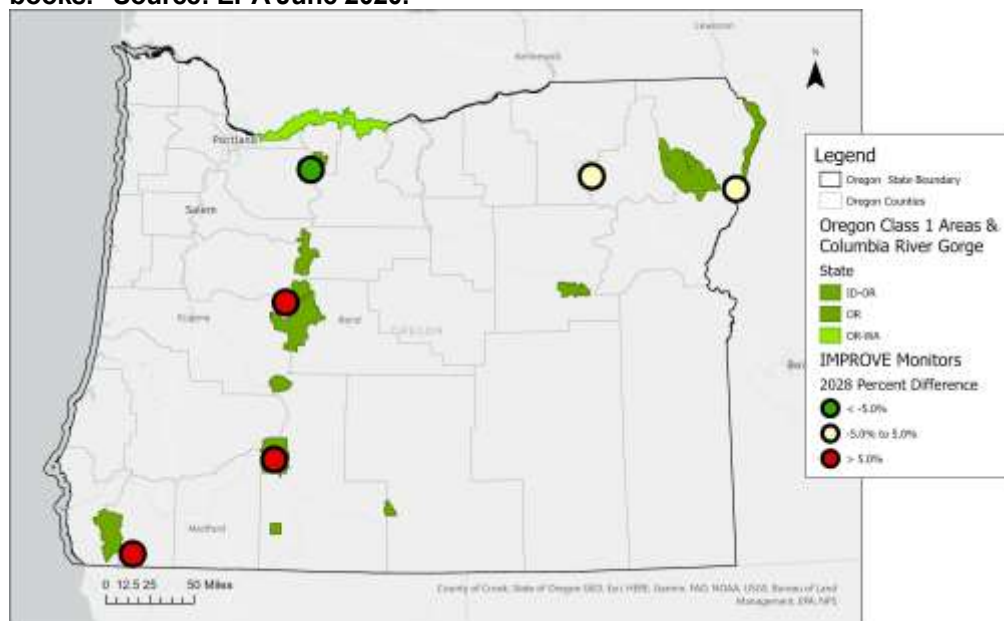
Figure 3. Visibility on most impaired days at the six Oregon IMPROVE monitors as a percent difference from the reasonable progress goal, 2014-2018.



¹ U.S. EPA. 2020. *Technical addendum including updated visibility data through 2018 for the memo titled “Recommendation for the Use of Patched and Substituted Data and Clarification of Data Completeness for Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program.”* https://www.epa.gov/sites/production/files/2020-06/documents/memo_data_for_regional_haze_technical_addendum.pdf (Accessed 12/22/20)

Based on EPA’s projections, if no further reductions are realized by 2028, the eight Class 1 Areas covered by the Three Sisters, Crater Lake, and Kalmiopsis monitors will be more than five percent above the glidepath and no longer meeting the reasonable progress goals (shown in red in Figure 4). In addition, the STAR1 monitor and the HECA1 monitor in the eastern part of the state will be within five percent of the 2028 reasonable progress goals target (the two dots in light yellow in the map below). Mount Hood Wilderness will still be below the glidepath.

Figure 4. Projected visibility on most impaired days at the six IMPROVE monitors as a percent difference from the reasonable progress goal for 2028, “on the books.” Source: EPA June 2020.



Based on the composition of regional haze forming pollutants at the IMPROVE monitors, the majority of U.S. anthropogenic contribution to regional haze in Oregon Class 1 Areas is from ammonium nitrate. This varies seasonally and by monitor. At some monitors, ammonium sulfate is a large contributor to regional haze formation, but that contribution seems to be significantly from international anthropogenic sources, and is projected to decrease as new standards for international marine shipping fuels take effect in 2020.

DEQ notes that the EPA Guidance from August 2019 states that a Class 1 Area meeting its reasonable progress goals is not a “safe harbor,” and that a state must meet its requirements to conduct analyses for pollution controls for regional haze forming pollutants in each planning period.

Long-term strategy for regional haze

EPA’s federal Regional Haze Rule requires states’ long-term strategies to include ongoing efforts and new measures to improve visibility over the next

10 years and commitments for future year updates. The long-term strategy for regional haze should also include state-to-state consultation, and document the technical basis on which states are determining emissions reduction measures.

The Regional Haze Rule, 40 CFR 51.308(f), says that states should consider stationary, mobile and area sources for regional haze controls. Please see Attachment A for a summary of these considerations.

Consultation

As part of fulfilling their requirements under the Regional Haze Rule, states must consult with Federal Land Managers. In the case of Oregon, that includes the National Park Service and the U.S. Forest Service, other states, and EPA, in the development of the Regional Haze Plan, in advance of putting out the plan as a SIP revision for public comment. In addition, Oregon rules require tribal consultation and public comment opportunities. Since January 2019, DEQ has met with the U.S. Forest Service, National Park Service, Washington, Idaho, Nevada, and California, and EPA Region 10 Regional Haze staff to inform and coordinate with multiple stakeholders in Oregon's Regional Haze planning efforts. In addition, DEQ sent letters to representatives of Oregon's nine federally recognized tribal nations in late 2019 notifying them of the Regional Haze planning process, and plans at least one more round of outreach before the draft SIP goes out for public comment later in 2021. DEQ has consulted with and informed regulated facilities regularly since December 2019 on the process for review of facility emissions and controls analysis.

DEQ Director Whitman hosts regular meetings with Oregon's nine federally recognized tribal nations, and DEQ Air Quality Administrator Mirzakhilili holds regular meetings with industry and environmental advocacy stakeholder groups. Regional Haze has been a topic at several of those meetings since late 2019.

In addition, DEQ held two virtual public information sessions in October and December 2020 to allow other interested stakeholders to learn about the Regional Haze Program, with attendance ranging from over 100 in October to nearly 50 in December.

The Regional Haze Rule requires a 60-day advance period for Federal Land Managers to review the draft plan before public comment, and DEQ anticipates that review will start in February 2021. In addition, DEQ submits Regional Haze documents as SIP revisions through rulemaking, which will require DEQ to hold a public comment period in spring 2021 in order to present proposed revisions for commission action in July 2021.

Two of the facilities identified for four-factor analysis are located in Lane County and DEQ staff have been coordinating with the Lane Regional Air Protection Agency for those two facilities.

DEQ staff have reached out to the Columbia River Gorge Commission and will continue to work with CRGC staff to inform them on Regional Haze efforts that may impact visibility conditions in the Columbia River Gorge National Scenic Area.

Reasonable Progress Goals

Reasonable progress goals must provide improvement in visibility conditions on most impaired days and no degradation on clearest days. The Regional Haze Plan will describe procedures DEQ will follow if Oregon's reasonable progress goals are slower than the uniform rate of progress, and if Oregon's sources are reasonably anticipated to contribute to visibility impairments in another state's Class 1 Areas. This analysis remains to be completed. Modeling results from the WRAP will be key to informing Oregon's ability to meet reasonable progress goals in 2028.

Environmental Justice Analysis

The Regional Haze Rule requires states to consider what beneficial effects controls for visibility improvement are likely to have on other factors, "non-air" factors such as public health. As well, stakeholders requested that DEQ conduct an analysis of environmental justice benefits of Regional Haze Program pollutant reductions. To better understand the potential co-benefits of pollutant controls, DEQ undertook an environmental justice analysis of communities surrounding the facilities that DEQ's Regional Haze decisions will affect.

EPA defines environmental justice as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

Executive Order 12898 (1994) focused federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The Order established an Interagency Working Group on Environmental Justice. Additionally, it directed federal agencies to develop strategies on how to identify and address the disproportionately adverse human health and environmental effects of programs, policies, and activities on minority and low-income populations.

For the Regional Haze analysis, DEQ first identified the demographic profiles of the communities immediately surrounding the facilities for which DEQ is considering controls. DEQ used data provided in the 2019 version of

EJSCREEN to calculate the following measures of potentially vulnerable communities for each census block group in the state. This version of EJSCREEN uses the 2013-2017 five-year American Community Survey data for demographic indicators:

- Percent minority (as defined within Census data)
- Percent low income (percent of population living in households making less than 200 percent of the federal income poverty level)
- Educational attainment (percent of the population over the age of 25 without a high school diploma)
- Linguistic isolation (percent of the population self-identified as speaking English “less than well”)
- Percent of population under five
- Percent of population over 64

These indicators, or variations thereof, are the standard demographic indicators used in dozens, if not hundreds of studies since the publication of *Toxic Wastes and Race* by the United Church of Christ in 1987, for examining potential patterns of disproportionate burden of environmental pollution on communities of color and/or low-income communities.

DEQ’s analysis shows that most communities surrounding the affected Title V facilities are above the state average vulnerability score. Areas with the highest vulnerability scores were Medford, Roseburg and southeastern Linn County. Income indicators in these areas most influence the vulnerability scores while percent minority indicators and linguistic isolation indicators most influence overall vulnerability scores in Portland and eastern Oregon counties. Figure 7, as included in Attachment A, shows these areas and data on a state map.

This is a preliminary analysis for understanding how particularly vulnerable communities may benefit from pollution controls put in place to improve visibility in Class 1 Areas and the Columbia Gorge. The analysis also illustrates where “environmental justice communities” are located in the state, and suggests that DEQ look to defining criteria that are well-established in environmental justice literature. In the absence of a state- or agency-approved definition of environmental justice communities, or a standard process for analyzing disproportionate effects, DEQ staff relied on best professional judgment and the academic literature to indicate where pollution reductions might have additional benefits to communities that experience socioeconomic and physiological vulnerabilities to disproportionate impacts from pollution.

- Next steps** The Regional Haze Rule requires that the Regional Haze Plan for the second planning period of the Regional Haze Program be submitted to EPA by July 31, 2021.
- As stated above, DEQ intends to have the draft plan available to Federal Land Managers for comment by February 2021, to open public comment in April 2021, and to come before EQC in July 2021 with a final version of the plan as a SIP submission. DEQ must submit the final Regional Haze Plan to EPA by July 31, 2021. Table 1, seen in Attachment A, shows the agency plan for activities through July 2021.
- Key issues** The key policy considerations that DEQ will bring to EQC as part of the Regional Haze Plan update will be:
- Is Oregon making reasonable progress with respect to visibility in our Class 1 Areas and the Columbia River Gorge National Scenic Area?
 - Do the control measures in the long-term strategy take reasonable measures to continue to improve visibility in Oregon’s Class 1 Areas and the Columbia River Gorge in the next 10-year period through 2028?
- EQC involvement** DEQ will bring the final Regional Haze Plan and SIP rulemaking item for commission action in July 2021. DEQ must submit an approved Regional Haze Plan to EPA by July 31, 2021.
- Attachment and supporting materials**
- A. *Attachment:* Oregon Regional Haze Plan Support document
 - B. *Link:* Regional Haze Rule ([40 CFR 51.308\(f\)](#))
 - C. *Link:* [Original 2009 RH Plan](#)
 - D. *Link:* [EPA Guidance on Regional Haze State Implementation Plans for the Second Implementation Period](#)
 - E. *Link:* [Q/d screening fact sheet](#)
 - F. *Link:* [Facilities selected for four factor analysis](#)

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Oregon Regional Haze Plan Support Document

*Prepared for the Oregon Environmental Quality Commission
Jan. 21-22, 2021, EQC regular meeting*

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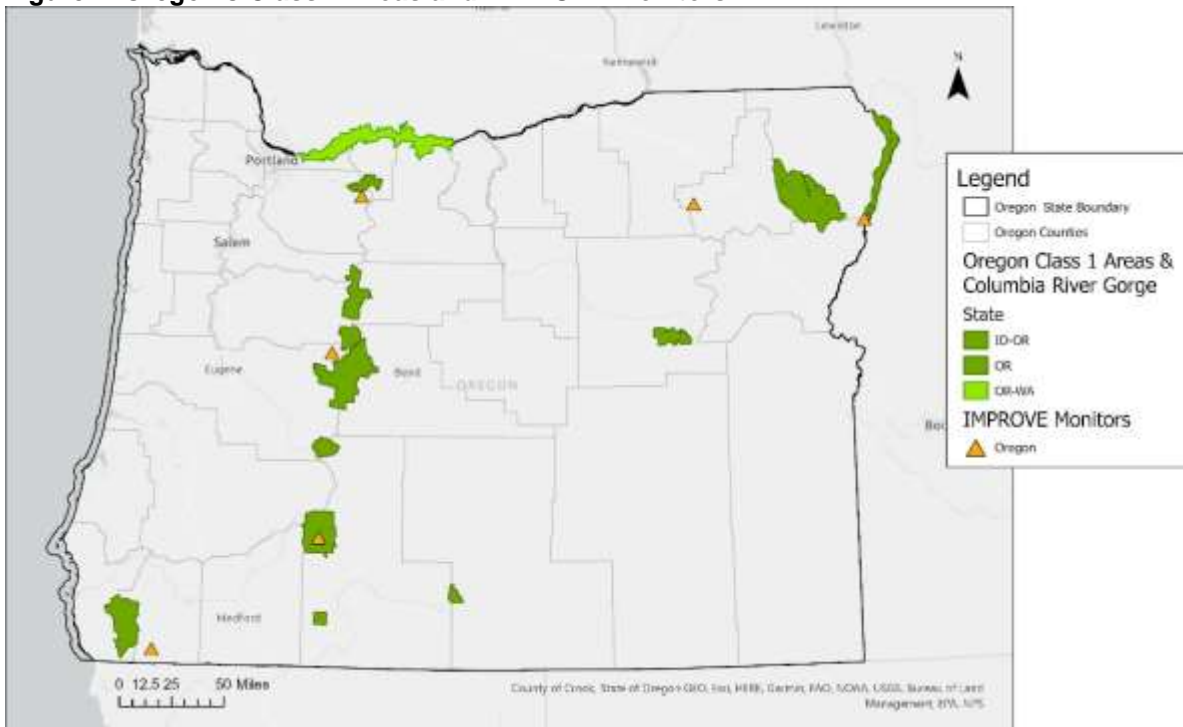
Introduction

This document provides additional detail, including specific figures and other supporting material, for the informational update to the Oregon Environmental Quality Commission on Jan. 21, 2021. Please note that some text in the sections below is intentionally duplicative of the text of the staff report. The numbering of figures included in this document is consistent with the numbering of figures in the staff report for this item.

1. Oregon's Class 1 Areas and monitoring network

The federal Regional Haze Rule requires states to address visibility protection for regional haze in Class 1 Areas in each state. In Oregon, there are 12 mandatory federal Class 1 Areas, including Crater Lake National Park, and 11 wilderness areas. Oregon includes the Columbia River Gorge National Scenic Area in the state's regional haze analyses. EPA requires states to adopt regional haze plans that would improve Class 1 Area visibility on the most impacted days – the worst 20 percent with some proportion of wildfire-impacted days removed – and ensure no degradation on the clearest days over the next 60 years. The goal of the Regional Haze Rule is to return visibility in Class 1 Areas to natural background levels by the year 2064.

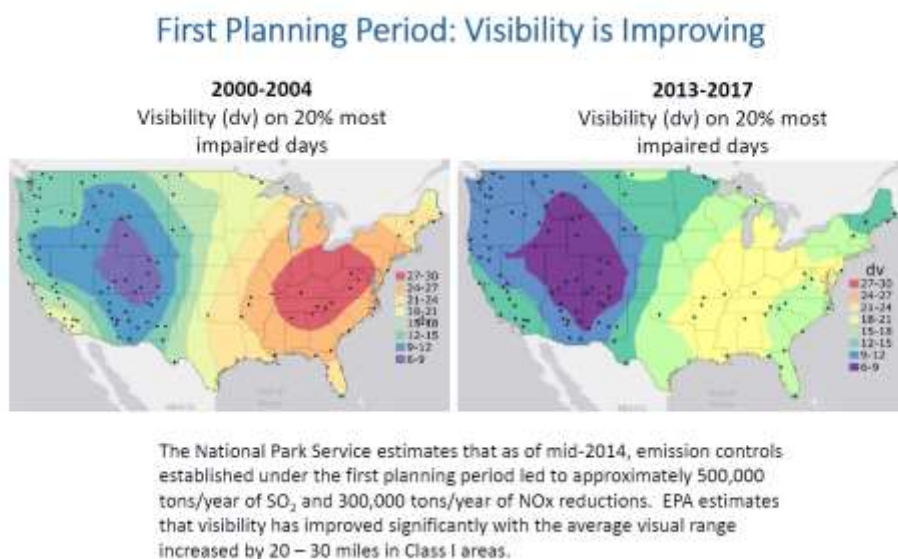
Figure 1. Oregon's Class 1 Areas and IMPROVE Monitors



Under the federal Regional Haze Rule, states are required to develop five-year progress reports showing the latest visibility trends analysis and the current status for meeting reasonable progress milestones since the last submission of the plan. The 2017 progress report summarized changes in monitoring and emissions data since the plan was last adopted in 2010 and evaluated the adequacy of the current State Implementation Plan to meet the progress goals. The 2017 report concluded that visibility was continuing to show positive improvement, the plan was meeting the reasonable progress milestones, and no substantive revision was needed at the time.

Figure 2. Visibility across the U.S. on the 20% most impaired days from the baseline period (2000-2004) to the most recent five-year period (2013-2017)

Source: EPA, September 2019



2. Long-term strategy for regional haze

EPA's federal Regional Haze Rule requires states' long-term strategies to include ongoing efforts and new measures to improve visibility over the next 10 years and commitments for future year updates. The long-term strategy for regional haze should also include state-to-state consultation, and document the technical basis on which states are determining emissions reduction measures.

The Regional Haze Rule, 40 CFR 51.308(f), says that states should consider stationary, mobile and area sources for regional haze controls. A summary of these considerations is below.

Stationary sources

Based on the Regional Haze Rule, the August 2019 Technical Guidance from EPA, and in alignment with other states as part of the Western Regional Air Partnership, DEQ conducted source screening for stationary sources based on the "Q/d" index, where Q is the total tons per year of haze-forming pollutants for a facility (NO_x, PM₁₀-PRI, and SO₂), and d is the distance in kilometers from the facility to the edge of a Class 1 Area.

DEQ used the Plant Site Emissions Limits for a facility in 2017 to calculate Q, and calculated d for all facilities and Class 1 Areas within a 400 kilometer radius of Oregon state boundaries in ArcGIS. DEQ assessed facilities permitted under the Title V program and the Air Contaminant Discharge Permit program. Based on guidance from EPA, DEQ used a screening value for Q/d of 5.00, which captured 80 percent of emissions from stationary sources at each Class 1 Area in the state. While the Q/d screening threshold varied from 2 to 10 among western states, most states in the region followed the same or similar approach. Figure 5 below shows the process used to screen stationary sources while the text following describes the process with more detail.

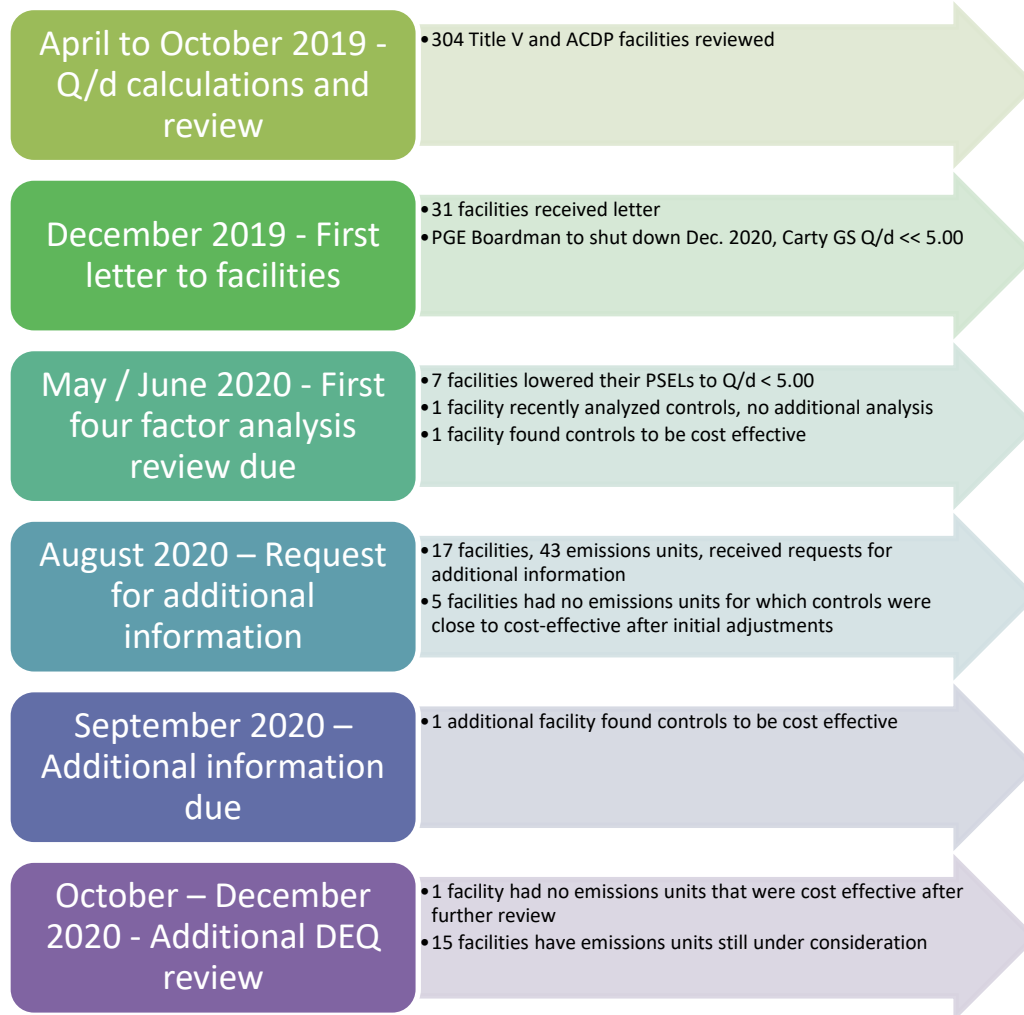
DEQ identified 32 facilities located in Oregon for which Q/d was greater than or equal to 5.00 for at least one Class 1 Area in Oregon. Of these, 31 facilities were identified as potentially needing to undergo four-factor analysis for pollution controls.

The four-factor analysis that the Regional Haze Rule and guidance require facilities and DEQ to consider for this planning period are: (1) cost of controls; (2) time necessary to install controls; (3) remaining useful life; and (4) energy and other non-air environmental impacts.

DEQ sent 31 facilities notification letters in December 2019. Facilities initially had until May 31, 2020, to conduct those analyses. DEQ extended the end date until June 15, 2020, upon request from some facilities to accommodate challenges arising from COVID-19.

If a facility had actual emissions below the screening threshold and potential emissions above the screening threshold, DEQ provided an opportunity to reduce their Plant Site Emissions Limits to a Q/d screening level of less than 5.00. By doing so, a facility became exempt from further analysis for controls. Seven facilities took this option by June 2020.

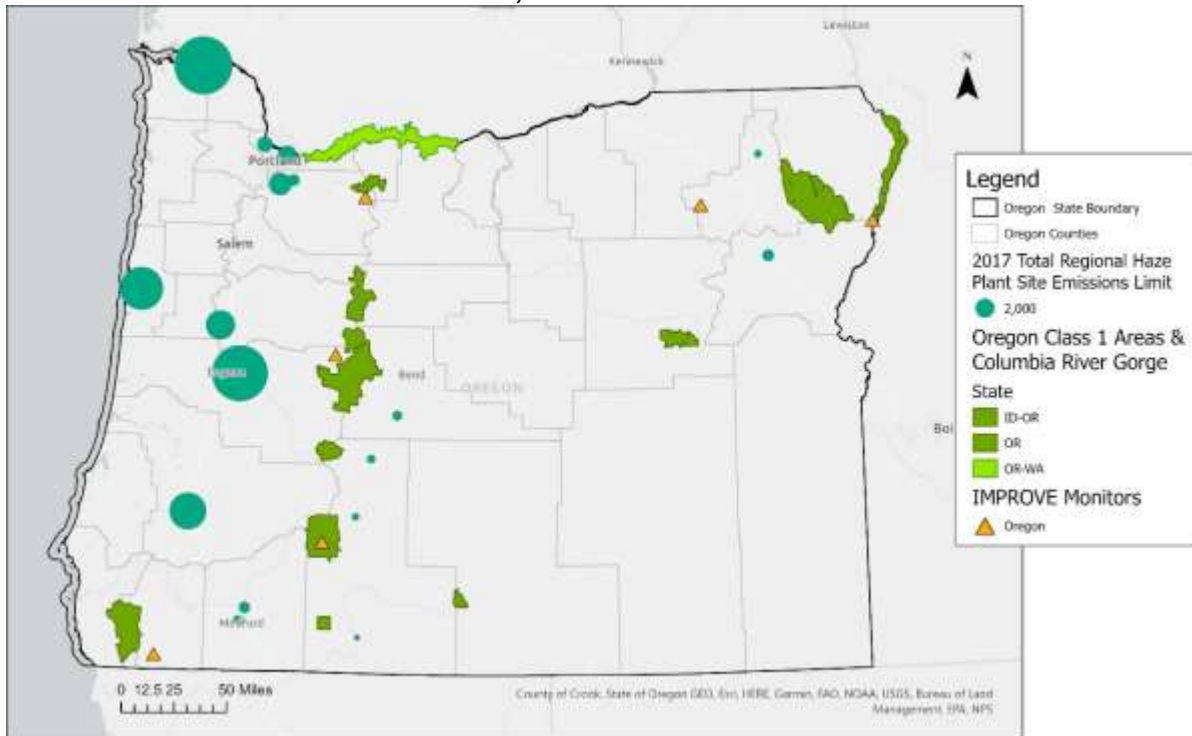
Figure 5. Four factor analysis process and timeline



DEQ received four-factor analyses from the remaining facilities by June 15, 2020, and staff reviewed those analyses. DEQ adjusted costs of controls to normalize cost estimates based on EPA guidelines for interest rate and equipment life. DEQ then identified control estimates under \$10,000 per ton of pollutant controlled after adjustment, and more than 20 tons of pollution reductions, for further analysis. DEQ notified 17 facilities in August 2020 of one or more facility emissions units for which DEQ would require additional analysis. DEQ requested that facilities submit additional or more detailed information about control costs by mid-September 2020. DEQ extended the deadline until the end of September due to extreme weather events, including fire and wind events, in early September.

Figure 6 shows the total permitted emissions of regional haze-forming pollutants for the facilities where controls are being considered.

Figure 6. Total Plant Site Emissions Limits (tons per year) of Regional Haze Forming Pollutants for facilities under consideration for controls, December 2020



For each facility, DEQ plans to take into account the number of Class 1 Areas potentially affected based on Q/d calculations, the total emissions, the cost of controls, remaining equipment life, and trajectory-based modeling results from the WRAP as a “weight of evidence” approach in making recommendations for controls. This approach is similar to that of several other states in the west.

Mobile sources

This 10-year Regional Haze Plan will incorporate and recognize significant local and state efforts to reduce mobile source emissions. Key efforts include:

- As a Section 177 state, DEQ is aligning with several California rules regarding mobile source emissions for heavy- and medium-duty diesel engine emissions standards, and for passenger vehicles. DEQ intends to propose new zero emission vehicle standards for medium- and heavy-duty trucks in late 2021 for EQC consideration.
- Local government agencies in the Portland metro region, including the Port of Portland, Multnomah County and the City of Portland have adopted new standards for clean construction which should result in significant reductions in the nonroad mobile source category.
- The Volkswagen and DERA grant programs aim to reduce emissions from diesel engines and provide funding to support purchase of new, cleaner equipment purchases in multiple parts of the mobile source category.
- In 2019, the Oregon Legislature adopted House Bill 2007, prohibiting the titling and registration of older (pre-2007 and pre-2010 model year) medium- and heavy-duty diesel trucks in the Clackamas, Multnomah and Washington counties. By 2029, the laws will be in full effect.

Other Oregon-specific programs such as the Clean Fuels Program encourage fuel switching to fuels with lower carbon intensities. The Oregon Clean Vehicle Rebate Program incentivizes electric vehicle ownership in the state. DEQ’s Vehicle Inspections Program plays an important part in regulating

emissions from mobile sources in Medford and the Portland metro area, and air quality planners are working to expand the Employee Commute Options program statewide to help reduce mobile sector pollution.

The majority of airport emissions are due to takeoffs and landings, and under the scope of federal, not state, environmental regulation, and therefore not included in Oregon's Regional Haze Plan. Ground operations are another significant part of the Port of Portland operations and they have plans to electrify its ground operations to the maximum extent possible, and has achieved significant reductions already.

Area sources

Area source sectors include prescribed fire, open burning, residential wood combustion, agriculture and dairies, rail, and airports. The Oregon Smoke Management Plan limits intrusions from prescribed burning into Class 1 Areas for Kalmiopsis and Crater Lake National Park. Oregon's HeatSmart program reduces emissions from residential wood combustion by requiring uncertified stoves to be removed at the time of home sales for the whole state. In addition, community grants authorized by the Oregon Legislature and administered by DEQ pay for wood stove changeouts to natural gas or electric-powered home heating devices in communities for which fine particulate matter pollution has been identified as a major source of wintertime air pollution.

DEQ recognizes that agricultural sources, including dairies and other confined animal feeding operations, are potentially the major source for the visibility impairments observed at Strawberry Mountain Wilderness, Eagle Cap Wilderness, and Hells Canyon Wilderness in the wintertime months. This sector also seems to have an impact on visibility in the Columbia River Gorge National Scenic Area in the wintertime months. DEQ will work with stakeholders and the Oregon Department of Agriculture during this planning period in order to identify potential agricultural sector reductions for the next planning period.

While the majority of visibility impairments from rail and airports fall under federal regulatory authority, DEQ is tracking the potential contributions of regional haze forming pollutants from each of these source sectors.

3. Environmental Justice analysis

As discussed in the staff report, DEQ undertook a detailed analysis of Environmental Justice-related elements as part of the update to Oregon's Regional Haze Plan. For the Regional Haze EJ analysis, DEQ first identified the demographic profiles of the communities immediately surrounding the facilities for which DEQ is considering controls. DEQ used data provided in the 2019 version of EJSCREEN to calculate the following measures of potentially vulnerable communities for each census block group in the state.

This version of EJSCREEN uses the 2013-2017 five-year American Community Survey data for demographic indicators:

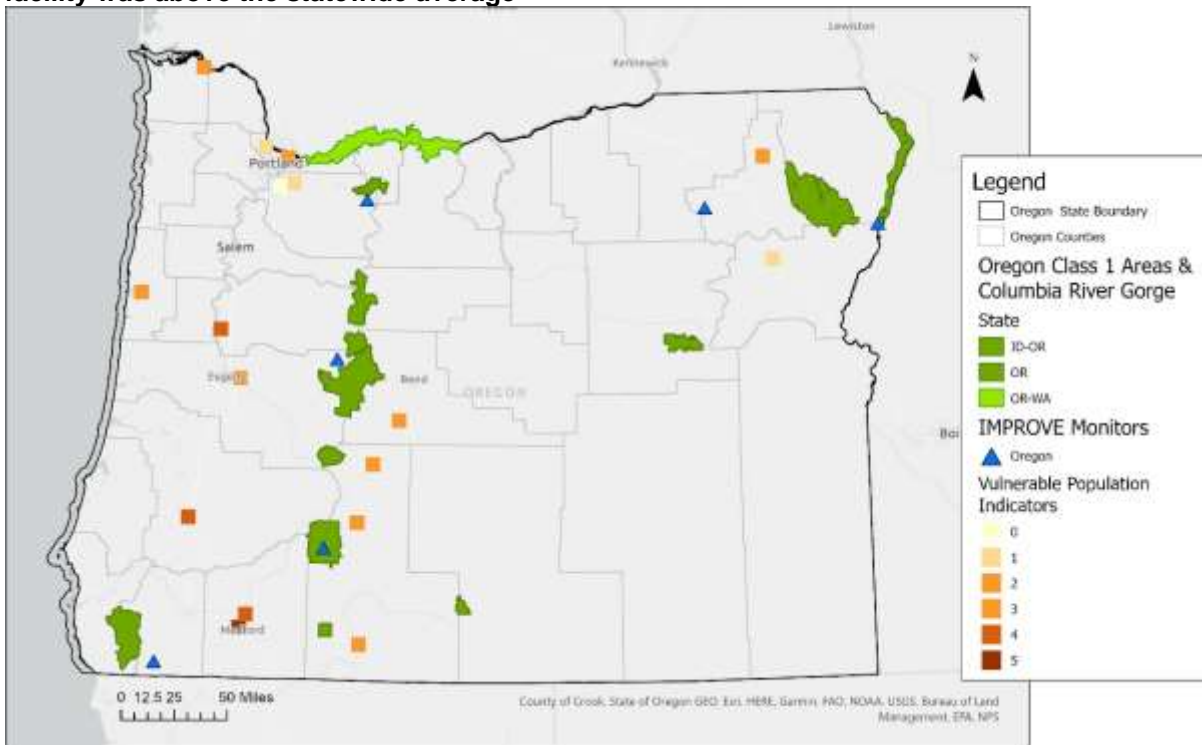
- Percent minority (as defined within Census data)
- Percent low income (percent of population living in households making less than 200 percent of the federal income poverty level)
- Educational attainment (percent of the population over the age of 25 without a high school diploma)

- Linguistic isolation (percent of the population self-identified as speaking English “less than well”)
- Percent of population under five
- Percent of population over 64

These indicators, or variations thereof, are the standard demographic indicators used in dozens, if not hundreds of studies since the publication of *Toxic Wastes and Race* by the United Church of Christ in 1987, for examining potential patterns of disproportionate burden of environmental pollution on communities of color and/or low-income communities.

For each facility, DEQ tallied a “1” if the value of that indicator was above the statewide average, or a “0” if the value was below the statewide average. The figure below shows the number of indicators for which the community within 2.5 miles of a facility was above the statewide average in 2017 (Figure 7). The maximum was 6 and the minimum was 0. If a census block group was only partially contained within the 2.5 mile radius of the facility, then the value for that census block group was scaled to the proportion of the block group within the circle.

Figure 7. Number of socioeconomic indicators for which the community within 2.5 miles of a facility was above the statewide average



4. Timeline of activities

Table 1. Plan of activities for the Regional Haze Program through July 2021

Note: Specific activities listed are subject to change

Activity	2019			2020				2021	
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Data Analysis & Modeling									
Source contribution & controls analysis									
Consultations & stakeholder info sessions									
Federal Land Manager Comment (60 d)								FEB- MAR	
Public Comment (45 days)									APR- MAY
DEQ response to public comments									JUN
EQC									JUL
Final SIP Submittal to EPA									JUL