

# Chapter 1 Overview

## 1.1 Background

In 1977, Congress amended the Clean Air Act (CAA) to include provisions to protect scenic vistas in certain Class I federal areas. In these amendments, Congress declared a national visibility goal:

*“The prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.” (CAA § 169A)*

In 1979, the Environmental Protection Agency (EPA), in consultation with the Secretary of the Interior, promulgated a list of 156 mandatory Class I Areas in which visibility was determined to be an important factor. Eight areas in Washington were designated mandatory Class I Areas.

To address the national visibility goal, EPA promulgated regulations in 1980 to address Reasonably Attributable Visibility Impairment (RAVI). RAVI is distinct plumes (called “plume blight”) caused by large stationary sources. RAVI regulations represented the first phase in addressing visibility impairment.

The Washington State Department of Ecology (Ecology) developed a revision to the State Implementation Plan (SIP) for the purpose of Visibility Protection (Visibility SIP) and submitted it to EPA in March 1985. EPA formally approved the Visibility SIP on May 4, 1987. Ecology has reviewed and revised the Visibility SIP several times since then. The most recent revisions were submitted to EPA on November 5, 1999 and approved by EPA on June 11, 2003.

Washington’s phase I Visibility SIP targets both the distinct plumes from large stationary sources and prescribed burning. Although prescribed burning from forestry activities is not considered a stationary source, Washington addressed this source in its phase I Visibility SIP because of significant impacts on visibility from prescribed burn plumes.

EPA adopted phase II visibility rules, the Regional Haze Rule (RHR) in 1999. The RHR addresses visibility impairment from widespread haze caused by emissions from multiple sources. These emissions are often mixed and transported over long distances. The RHR established a comprehensive visibility protection program for the 156 mandatory Class I Areas.

## 1.2 Regional Haze Rule

The objectives of the RHR are to improve existing visibility in all 156 mandatory Class I Areas, prevent future impairment of visibility by man-made sources, and meet the national goal of natural visibility conditions by 2064. The RHR requires each state to adopt a Regional Haze (RH) SIP that focuses on improving the Most Impaired Days (the haziest or worst 20% of days) and protecting the Least Impaired Days (the clearest or best 20% of days). A state’s RH SIP

must provide a comprehensive analysis of natural and human-caused sources of haze in each mandatory Class I Area within the state and contain strategies to control and reduce emissions that contribute to haze. The SIP must also address mandatory Class I Areas outside of the state that are reasonably anticipated to be affected by emissions from the state.

The RHR breaks the RH Program into several planning phases extending from 2005 to 2064. This first RH SIP covers the initial (or foundational) planning period that extends from 2005 to 2018. The foundational SIP establishes the basis for RH SIP revisions addressing future planning periods and initiates the process of making reasonable progress toward the 2064 goal.

This foundational RH SIP integrates RAVI and regional haze through a comprehensive Long-Term Strategy that addresses both. This allows for coordinated review and revision of the SIP every five years in accordance with EPA's visibility requirements.

### **1.3 Organization of Washington's Foundational Regional Haze State Implementation Plan**

Washington's RH SIP addresses the requirements specified in section 51.308 of the RHR. The RH SIP is organized as follows:

Chapter 2 addresses plan development. This includes the role of regional planning, the Western Regional Air Partnership (WRAP), and consultation with Federal Land Managers (FLMs), Tribes, and other states.

Chapter 3 is a primer that provides information on basic plan elements and key concepts used in the RH SIP.

Chapter 4 describes Washington's eight mandatory Class I Areas and visibility monitoring for these areas.

Chapter 5 covers baseline and natural visibility conditions for each of Washington's eight mandatory Class I Areas. The uniform rate of visibility improvement for achieving the 2064 goal is also discussed here along with the uniform glide slope for each mandatory Class I Area.

Chapter 6 discusses the baseline and 2018 statewide emissions inventories that were developed and used to prepare this plan.

Chapter 7 describes the types of modeling used in the WRAP region and that Washington relied upon for this foundational SIP.

Chapter 8 discusses the significant in-state and regional sources of haze affecting Washington's mandatory Class I Areas and projected to affect visibility conditions in 2018. This chapter also presents which mandatory Class I Areas in adjacent states are significantly impacted by Washington emissions.

Chapter 9 defines the reasonable progress goal for each of the eight mandatory Class I Areas in Washington. Demonstrating reasonable progress towards the national visibility goal requires setting goals for the Most Impaired Days and Least Impaired Days for each mandatory Class I Area.

Chapter 10 describes the long-term strategy to address reasonably attributable and regional haze visibility impairment in Washington's mandatory Class I Areas and mandatory Class I Areas outside of the state that may be reasonably anticipated to be impacted by emissions originating in Washington.

Chapter 11 describes Best Available Retrofit Technology (BART) determinations for Washington. BART is a significant focus of the foundational RH SIP. BART applies to certain older industrial facilities that began operation before federal Prevention of Significant Deterioration (PSD) rules were adopted to protect visibility in Class I Areas.

Chapter 12 addresses tracking progress towards the national visibility goal and performing plan reviews. The RHR requires commitments to monitoring, reporting, assessing visibility impacts, and revising the RH SIP.

Chapter 13 summarizes the national visibility goal, Washington's foundational RH SIP, and the long-term challenges and issues that must be and addressed to reach the national visibility goal in Washington.