

Alaska Regional Haze Overview and the Western Regional Air Partnership

WRAP Alaska Regional Haze
Technical Analysis Meeting

April 26, 2005

Presentation Overview

- Visibility Problems and Causes of Haze
- Regional Haze Rule
- Western Regional Air Partnership





Visibility Problems



18 8 5

Causes of Haze

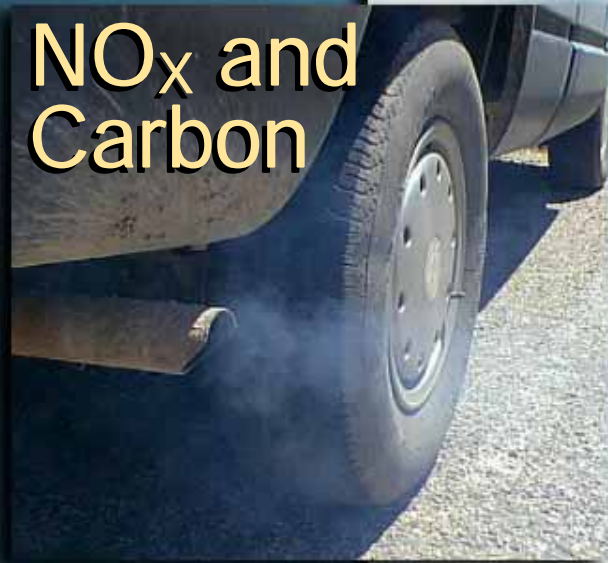


Causes of Haze



Human Activities

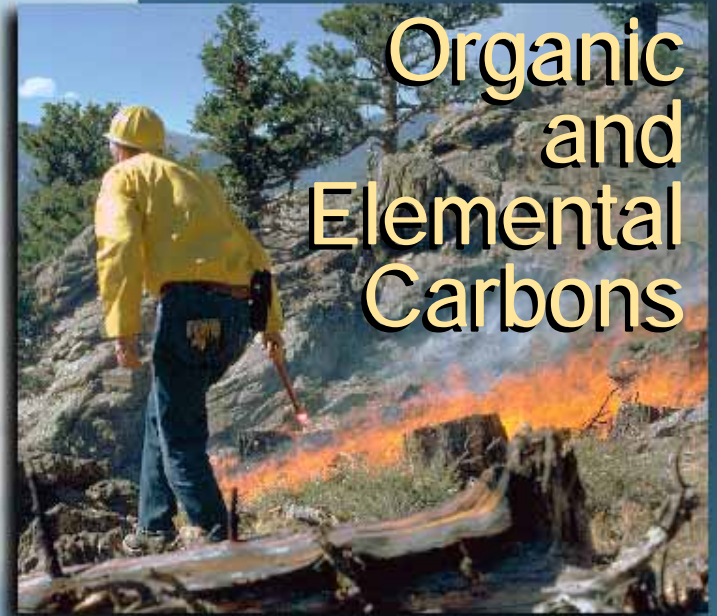
NO_x and
Carbon



SO_2



Organic
and
Elemental
Carbons



Human Activities



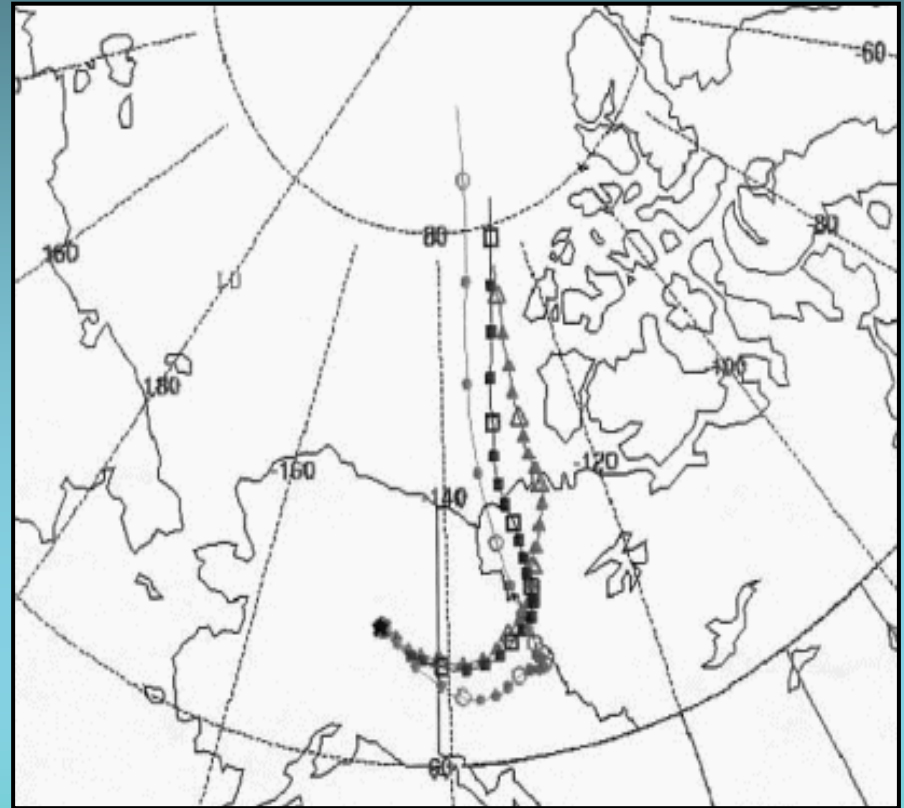
Particulate
Matter



31 11 5

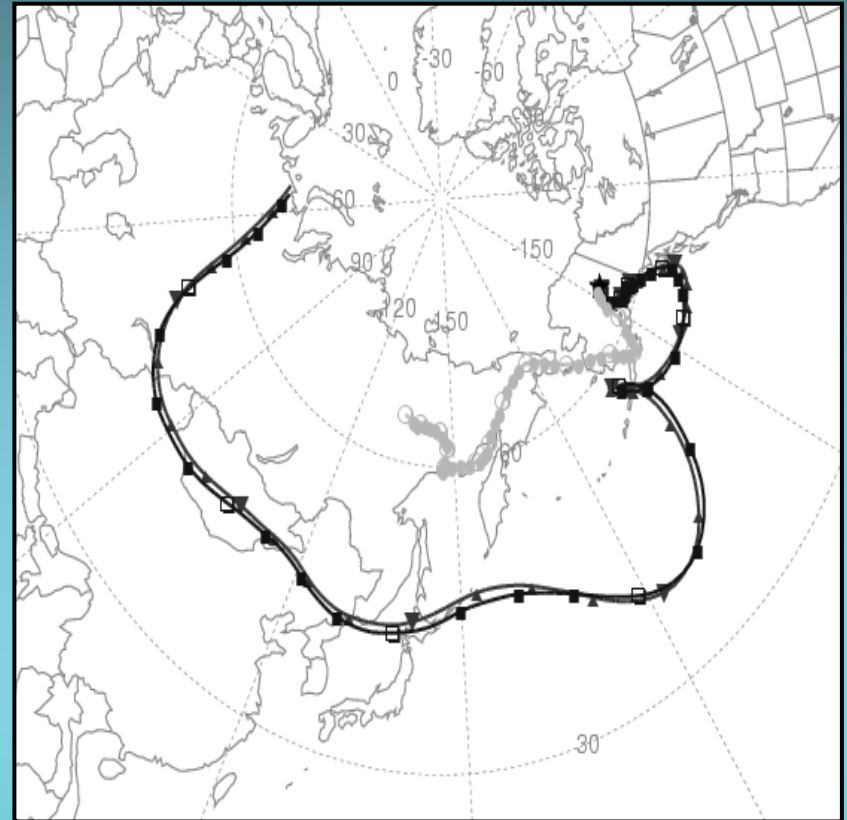
Arctic Haze

- Air enters Alaska from the Arctic
- Occurs in winter
- Layered haze
- Characterized by sulfate, metals and light absorbing carbon



Asian Dust

- Air enters Alaska from Asia, especially China
- Occurs in spring
- Layered haze
- Characterized by soil elements and metals



Wildfire Smoke

- Wildfires in Alaska, Canada, and Siberia produce smoke that reaches the park
- Occurs in summer
- Layered or regional haze depending on the fires' locations
- Characterized by potassium and organic and elemental carbon



What Can Be Done?



Regional Haze Rule



EPA Regional Haze Rule

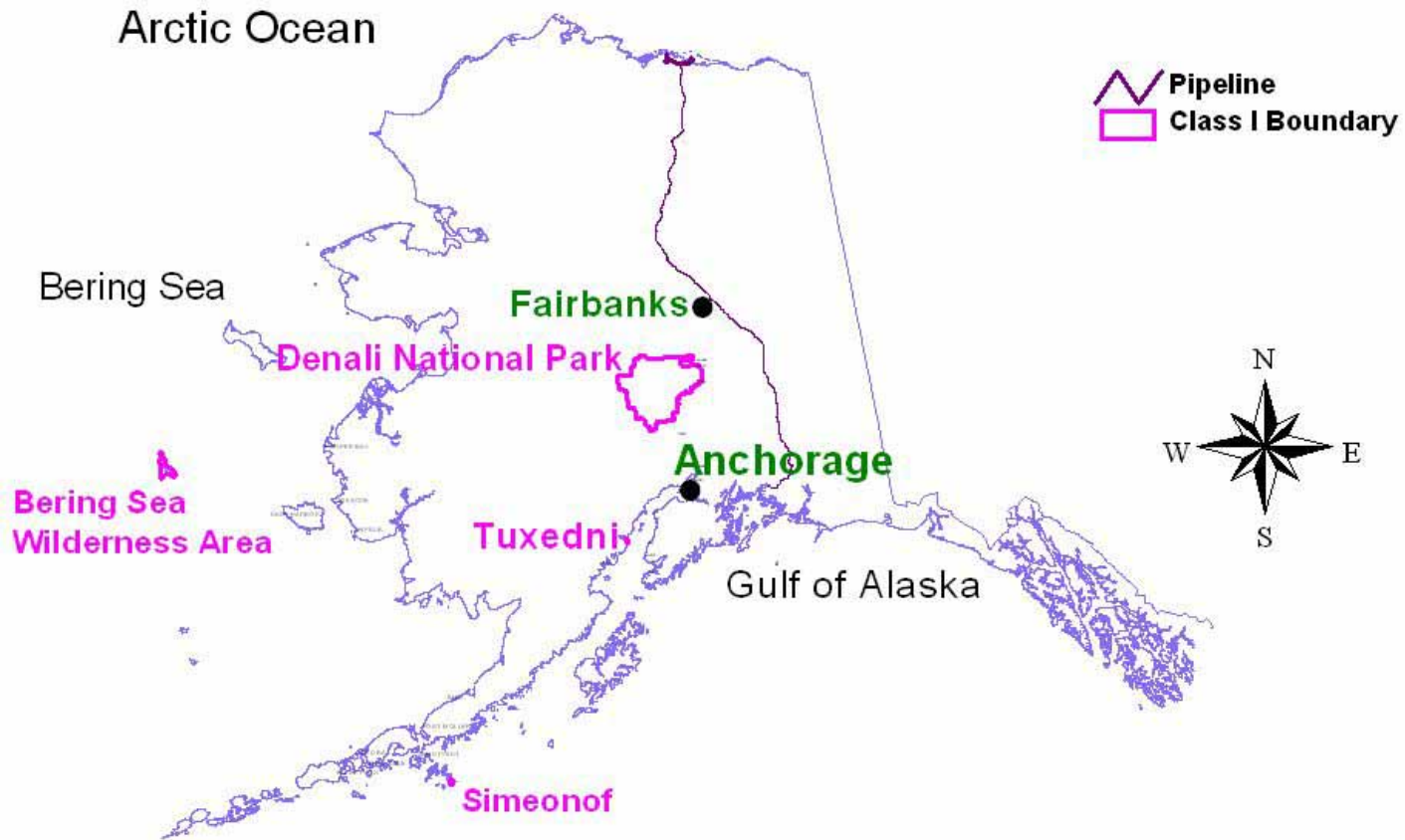
- In 1977 amendments to the Clean Air Act (CAA) first established a national visibility program
- Through several amendments to the CAA, Congress set a national goal for visibility as “ *the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal Areas which impairments results from manmade air pollution.*”
- The 1999 promulgation of the *Regional Haze Rule* (RHR) sets a definitive, long-term period in which to achieve the national goal and criteria for establishing and measuring “reasonable progress” towards that goal.

Regional Haze Rule (cont.)

- States are required to develop State Implementation Plans and to conduct certain analyses (spelled out in RHR) for developing “reasonable progress goals” to reach natural background conditions in 60 years (2064).
- States need to establish specific goals for each Class I area to:
 - 1) improve visibility on the 20% haziest days
 - 2) ensure no degradation of visibility on the 20% clearest days



Alaska Class One Areas



Regional Haze Rule

- Alaska and the other states must submit regional haze plans to EPA by December 17, 2007.
- During the next 18 months Alaska will be working on a plan for the four Class I areas
- The draft plan will be put through a public regulatory process for comments



Plan Development Highlights

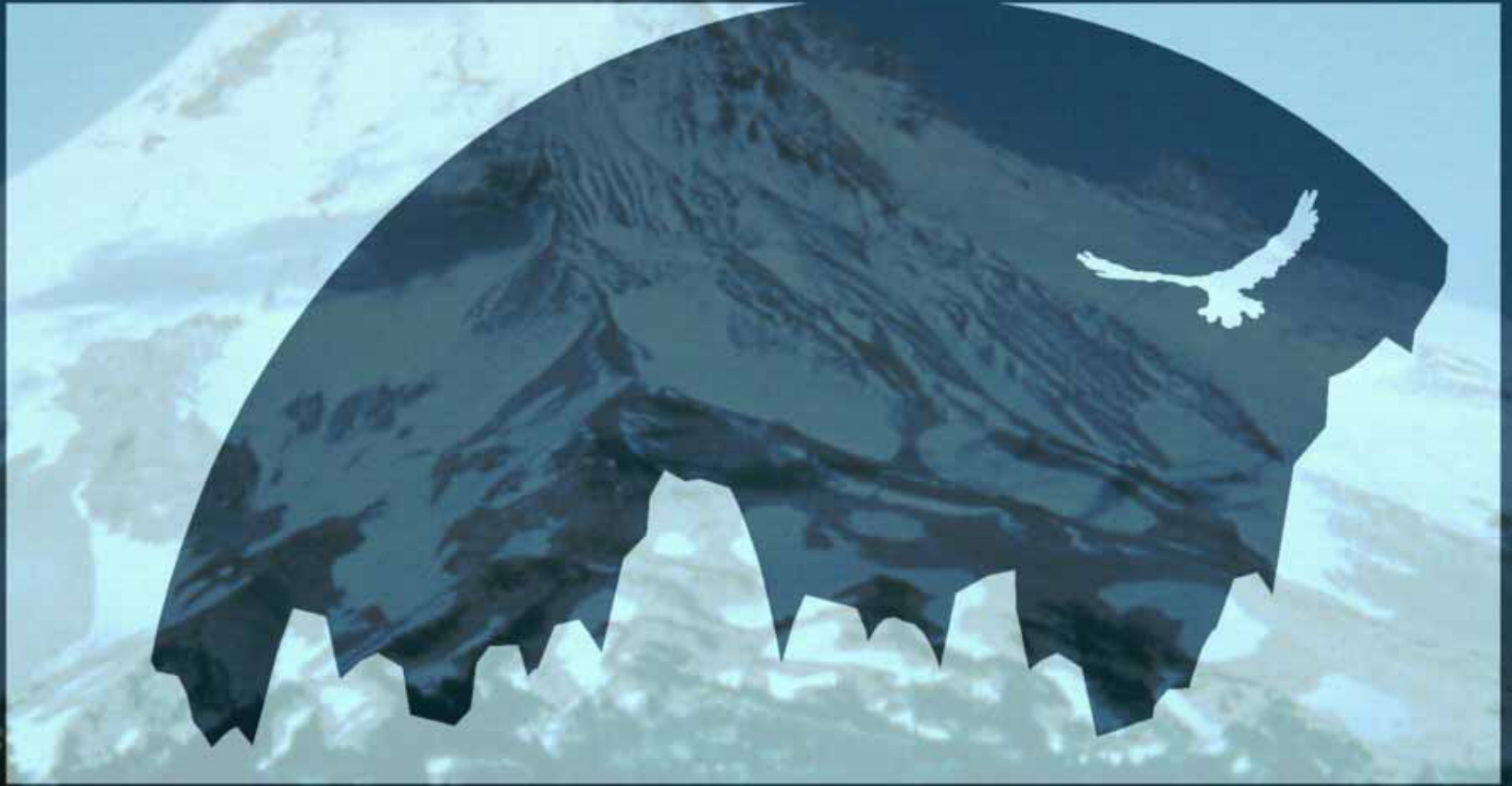
- Technical data is important for building a sound foundation for a plan
- We need to understand the visibility impacts in Alaska and where the pollution comes from
- Must meet the regulatory requirements
- We need to look at whether or not any additional controls are needed to show progress in meeting the goals



Plan Development Highlights

- Various projects needed for plan development are being conducted by:
 - Alaska DEC
 - Federal Land Managers, and
 - The western regional planning organization, WRAP



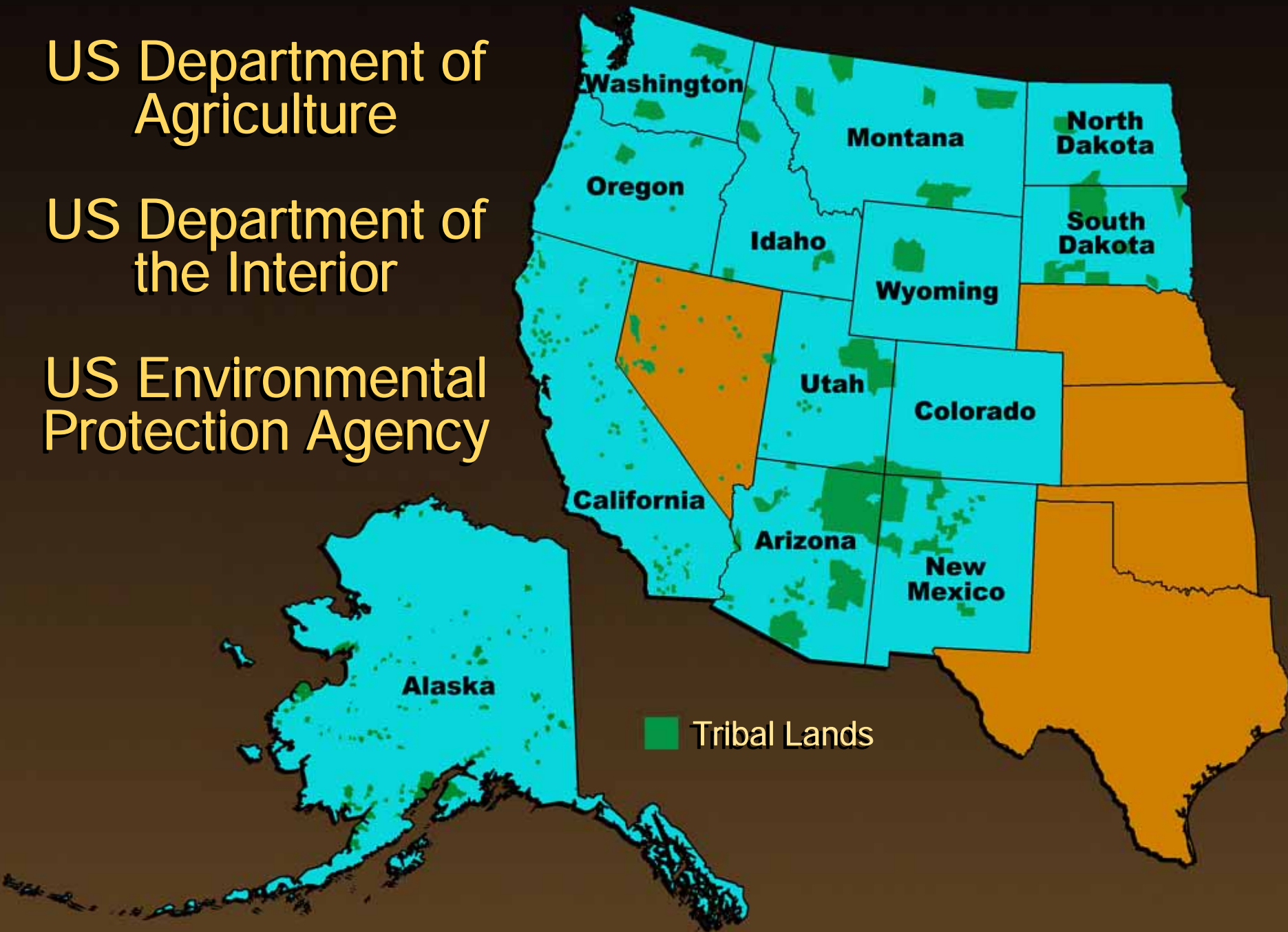


Western Regional Air Partnership

US Department of
Agriculture

US Department of
the Interior

US Environmental
Protection Agency



A scenic view of the Grand Canyon, showing the deep, layered rock formations and the winding river below. The sky is blue with some light clouds. The text is overlaid on the left side of the image.

Campo Band of Kumeyaay Indians

Cortina Indian Rancheria

Hopi Tribe

Hualapai Nation of the Grand Canyon

Nez Perce Tribe

Northern Cheyenne Tribe

Pueblo of Acoma

Pueblo of San Felipe

Confederated Tribes of Salish and Kootenai

Shoshone-Bannock Tribes of Fort Hall

Native Village of Shungnak



Local, State, and Regional Solutions



The diagram features a central title 'WRAP Stakeholders' in large, bold, yellow font. Surrounding this title are several concentric, semi-transparent teal circles that create a ripple effect. The names of various stakeholders are arranged in a circular pattern around the center, with some on the left and some on the right. The text is in a smaller, bold, white font.

WRAP Stakeholders

Louisiana Pacific

Phelps Dodge Miami

Plum Creek Timber

Air Sciences, Inc.

Wyoming Refining Co.

Pinnacle West Capital Corp.

Chevron Corp.

BP/Amoco

Enron Wind Corp.

Kennecott Energy Co.

Energy Strategies, Inc.

Pacificorp

Viron Energy Service

Sierra Club

Land and Water Campaign

Clean Power Campaign

Renewable Northwest Project

NM Citizens for Clean Air and Water

Natural Resources Defense Council

Wasatch Clean Air Coalition

Madera County Farm Bureau

Oregon Forest Industry Council

Los Alamos National Lab

Atmospheric and Environmental Research, Inc.

Association of International Automobile Manufacturers

Western Highway Institute

Initiatives and Technical Oversight Committees (IOC & TOC)

Policies and Strategies



WRAP Joint Technical & Policy Forums

- Dust Emission Joint Forum
- Fire Emission Joint Forum
- Stationary Source Joint Forum



WRAP Technical Forums & Work Groups

- Emission Forum
- Air Quality Modeling Forum
- Ambient Monitoring & Reporting Forum
- Tribal Data Development Work Group
- Attribution of Haze Work Group



WRAP Policy Forums & Work Groups

- Mobile Sources Forum
- Economic Analysis Forum
- Air Pollution Prevention Forum
- Sources In & Near Class I Areas Forum



Other WRAP Committees

- Air Managers' Committee
- Communications Committee
- Planning Group



Class I Area Plans Due by 2007

-  National Parks
-  National Wilderness Areas
-  National Wildlife Refuges



Web Site

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