

# **Georgia Basin / Puget Sound International Airshed Planning**

**BC / Washington Environmental Cooperation Council  
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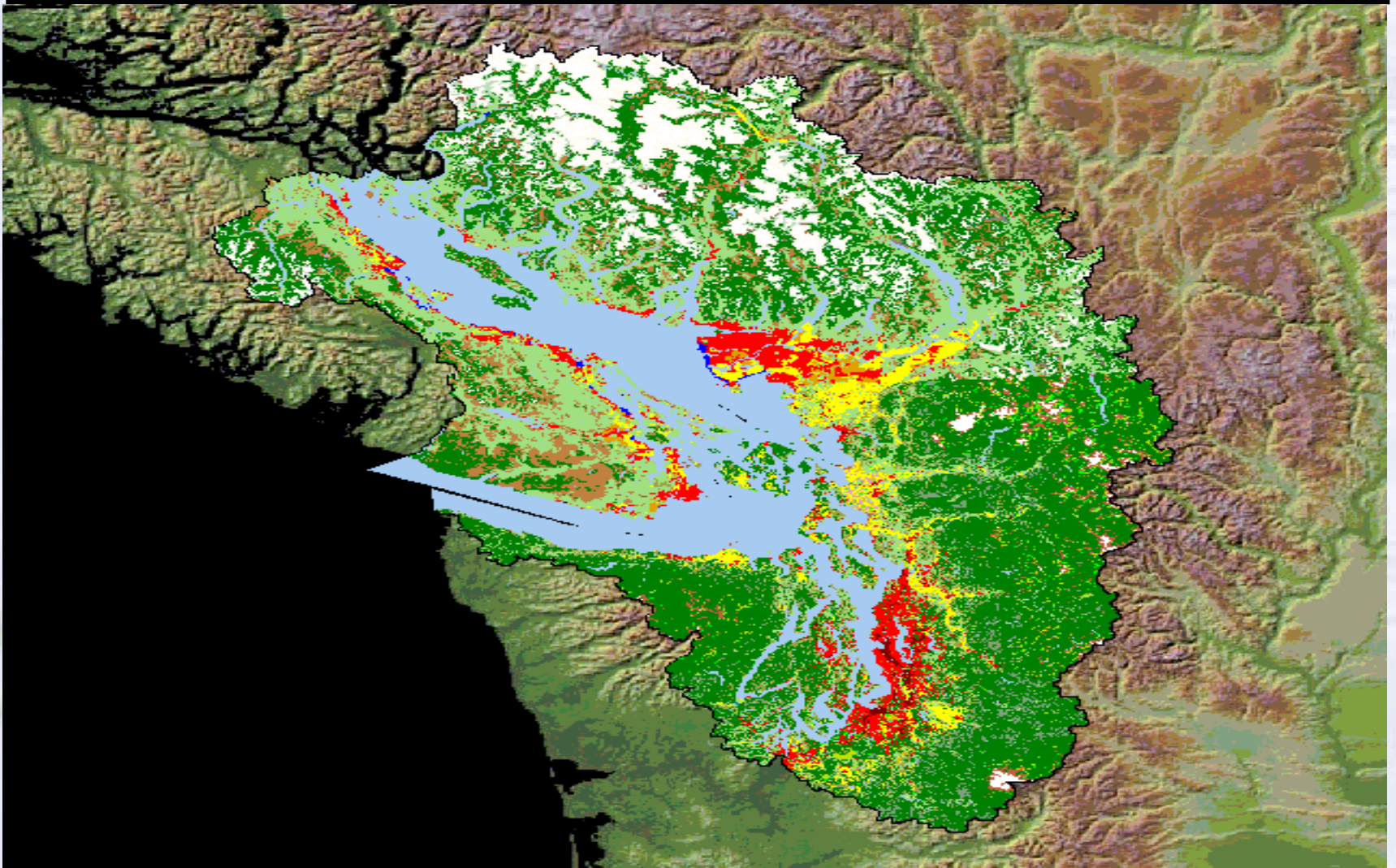
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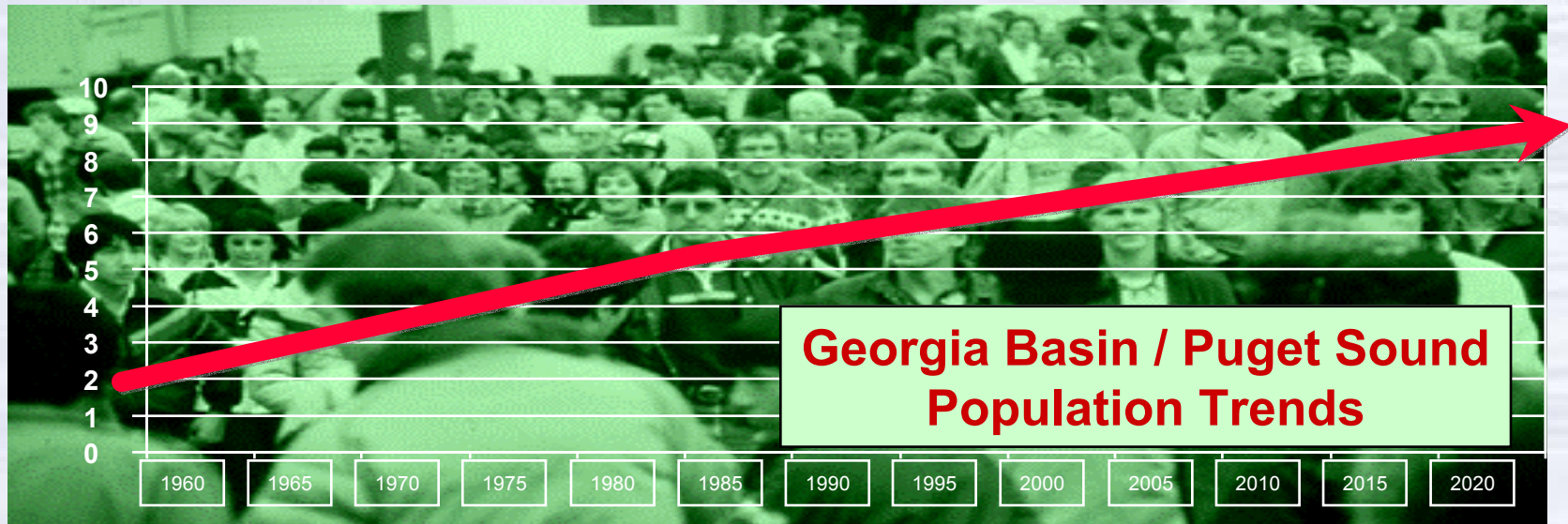
# Presentation Outline

- **GB/PS IAS Purpose, Process, Schedule**
- **U.S. EPA Regional AQ Programs & Priorities**
- **Georgia Basin AQ Issues & Concerns**
- **Puget Sound AQ Issues & Concerns**
- **GB/PS International Airshed Characterization**
- **Selected Early Actions:**
  - **Low Sulphur Diesel**
  - **On-road testing of HDV Emissions, New Source Review**
  - **Marine Vessel Emissions**
- **NW Collaborative Air Priorities Project**
- **Summary**

# Georgia Basin / Puget Sound International Airshed



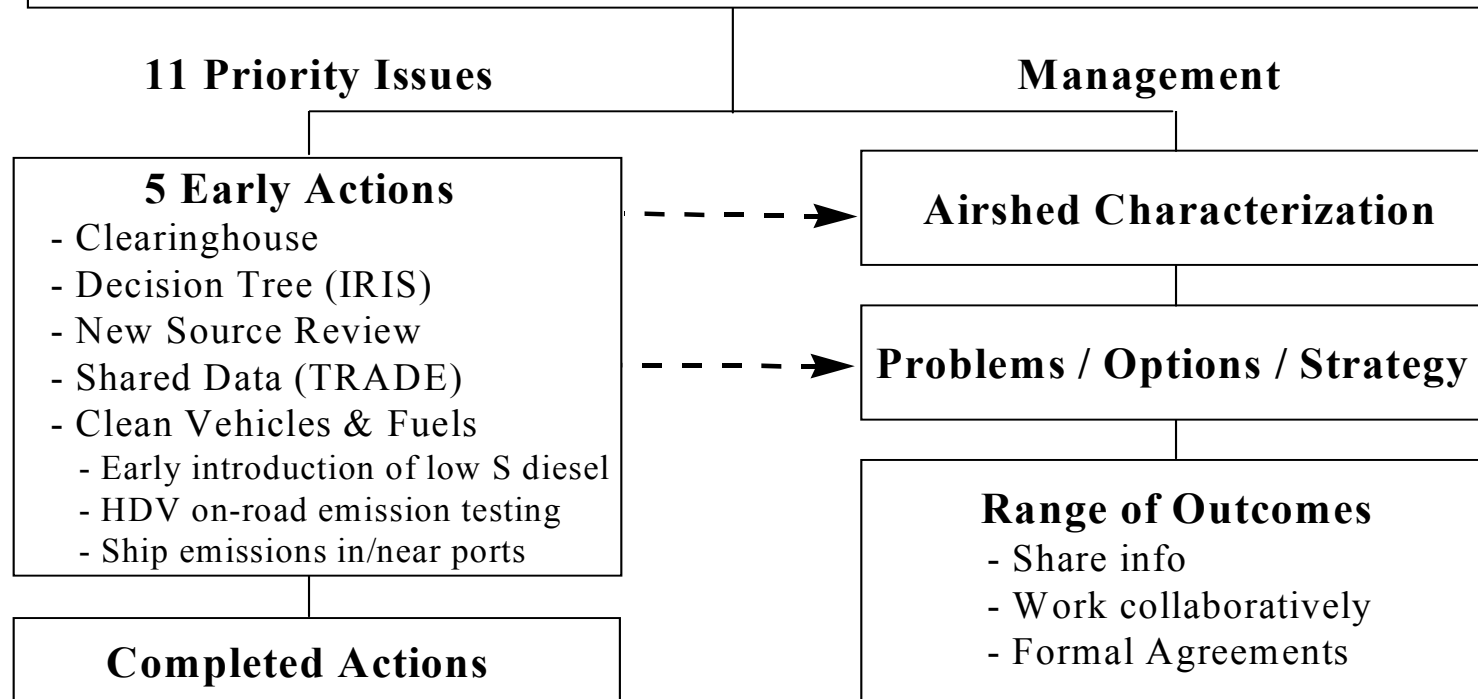
# Shared Air Quality Challenges



# Georgia Basin / Puget Sound International Airshed Strategy

## U.S. EPA - Environment Canada Joint Statements:

- Jan. 2000 Statement of Cooperation on the Georgia Basin/Puget Sound Ecosystem
- Aug. 2002 Statement of Intent on a GB/PS International Airshed Strategy



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# **U.S. EPA Regional AQ Priorities and Programs**

## **What Does Region 10 OAQ Do?**

- **Delegations to and oversight of state and local agencies**
- **Grants to state and local agencies**
- **Direct implementation in Indian Country**
- **Enforcement & compliance - both oversight and direct**
- **Non-regulatory programs such as indoor air quality**

# **U.S. EPA Regional AQ Priorities and Programs**

## **Five Regional Program Priorities**

- **Protect Air Quality in Indian Country through Direct Implementation**
- **New Source Permitting Programs**
- **Protect Public Health from Smoke due to Burning and Diesel Emission**
- **Reduce Threats from Toxic Pollutants**
- **Effective Planning to Target our Resources Where We Can Really Make a Difference for Public Health**

# U.S. EPA Regional AQ Priorities and Programs

## Examples

- **Agricultural burning and public health**
- **Indian Country - providing direct implementation and building capacity**
- **Support for community-based air toxics projects such as risk assessments and diesel retrofits**
- **Targeted enforcement and compliance**
- **NW-CAPP**

# Georgia Basin Air Quality Issues and Concerns

- **BC's top air quality issue is particulate matter, based on currently understood health effects.**
- **Within the Georgia Basin region, particulate matter and ozone are understood to have approximately equal significance.**
- **Within much of the region, emissions from transportation, residential, and commercial sources far exceed those from industry.**
- **Climate change response will need to be factored into our thinking.**

# Georgia Basin Air Quality Issues and Concerns

- **The Lower Fraser Valley is the region with best technical understanding and most developed cooperative management approaches.**
- **GVRD and FVRD play a key role in planning and management ; cooperation is vital to success.**
- **Interest in better understanding the regional airshed - technically (e.g. modeling and measurement), as well as from a management perspective (e.g. shared best practices and joint actions) .**

# Puget Sound Air Quality Issues and Concerns

## Department of Ecology

- Reduce Risk from Toxic Air Pollutants
- Reduce Motor Vehicle Emissions
- **Characterize Air Quality Throughout the State**



# **Puget Sound Air Quality Issues and Concerns**

## **Northwest Air Pollution Authority**

- **New Permitting for Refineries Related to Low Sulfur Gasoline and Diesel Production**
- **Tracking and Enhancing the Flow of Information Related to New Power Facilities (BP Cherry Point)**
- **Expanded Air Monitoring Network and Information Sharing with Canadian Agencies**

# Puget Sound Air Quality Issues and Concerns

## Puget Sound Clean Air Agency

- **Fine Particulates**
  - Monitoring programs, health effects, standards
- **Diesel Emissions**
  - Diesel Solutions Program: Clean Fuels and Retrofits
- **Air Toxic Emissions**
  - Wood smoke and regulation programs
- **Climate Change**
  - Local opportunities

# Characterization of the GB/PS International Airshed

- **Separate PowerPoint presentation  
by Bruce Thomson**



# **GB/PS IAS Early Action: Early Introduction of Low Sulphur Diesel**

- **Puget Sound area fleet commitments to use low sulfur diesel or bio-diesel (PSCAA Initiative)**
  - Fuel usage is approaching 20 million gallons per year
  - Almost 20 users that include cities, school districts, Army and Air Force installations and Washington State Ferries
- **NWAPA permitting of refineries to add capacity for low sulfur fuels to meet US EPA 2006 standards**
- **Diesel retrofit projects by NWAPA (2) & PSCAA (7+)**

# **GB/PS IAS Early Action: Heavy Duty Vehicle On-road Emission Testing**

## **GOAL**

- **To evaluate the effectiveness of the Heavy Duty Diesel Emission Inspection and Maintenance (HDDV I/M) program in the GVRD and FVRD.**
- **To recommend changes and/or improvements for the future, including potential applications/enforcement in neighbouring jurisdictions.**
- **To establish a sustainable model for program delivery.**

# **GB/PS IAS Early Action: Heavy Duty Vehicle On-road Emission Testing**

## **Background and Status:**

- **The AirCare On-Road Program (ACORP) is an HDDV I/M Program that has been operated in the BC portion of the Lower Fraser Valley from 1996 to 2002.**
- **During 2002, an independent evaluation concluded that the program is a cost-effective means of targeting emissions from smoking vehicles.**
- **Efforts are now focused on identifying a sustainable funding and delivery model.**
- **Key players are the industry stakeholders, health and environmental groups, and environmental agencies.**

# **GB/PS IAS Early Action: New Source Review**

- **Objective**

- Identify Canadian and U.S. gov't procedures for notification of new projects with potential transboundary emission and air quality issues
- Identify Canadian & U.S. gov't regulatory processes for review of new sources of air emissions (NSR)
- Review current inter-agency co-operation on NSRs and recommend improvements for AQ management

- **Geographic Area of Interest**

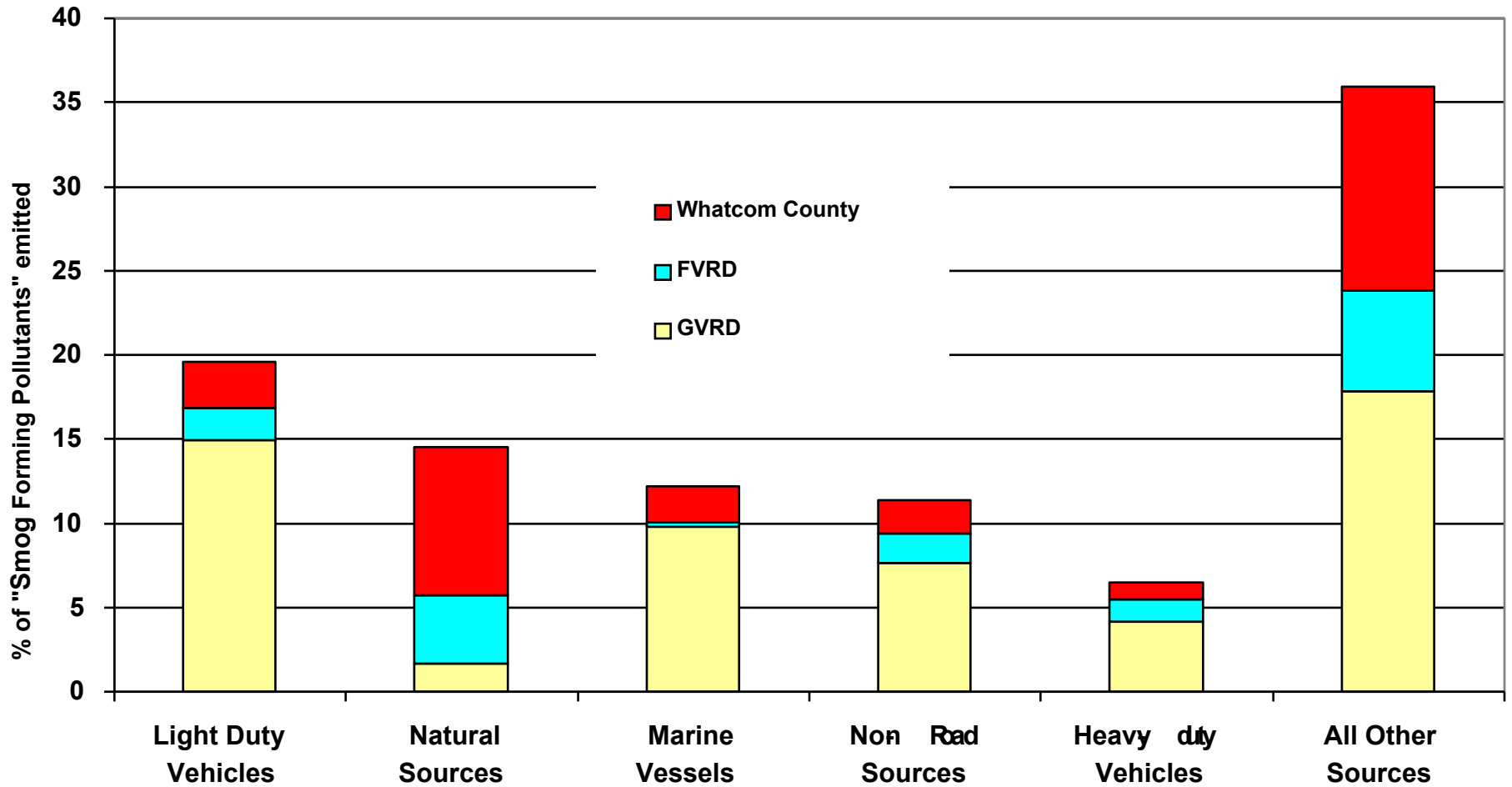
- Primary - Georgia Basin / Puget Sound
- Secondary- B.C. / U.S. border (WA., Idaho, Montana)

# GB/PS IAS Early Action: New Source Review

- **Project Partners**
  - EC, BC MWLAP, WA DoE
- **Project Timing**
  - Feb. 2003 - Project initiation
  - Feb./March - Interviews & literature review
  - 31 March - Draft report
  - May, 2003 - Final report



# GB/PS IAS Early Action: Ship Emissions In / Near Ports



# **GB/PS IAS Early Action: Ship Emissions In / Near Ports**

- **Progress to Date**

- 1997/1998 marine vessel emission test project
- B.C. and Washington emission inventory for the year 2000
- Emission reduction options studies
- Fuel quality and engine emission control studies
- M.A.Turbo/Engine NOx control demo projects

- **Next Steps**

- Establish a marine vessel air emissions work group
- Review marine vessel programs in other jurisdictions
- Develop voluntary measures with cruise and shipping industry
- Establish transboundary collaboration among ports and regulatory agencies in Georgia Basin / Puget Sound

# **Action Related to GB/PS IAS: NW Collaborative Air Priorities Project (NWCAPP)**

## **What will it do?**

- **Identify 5 regional priorities for EPA Region 10 to focus on in the next 5-10 years**
- **Mobilize precious resources**
- **Reduce risk**
- **Form non-traditional partnerships**
- **Bring hundreds of people together to work on protecting air quality at the NW Air Summit**

# **Action Related to GB/PS IAS: NW Collaborative Air Priorities Project (NWCAPP)**

## **What's Different about NW CAPP?**

- **Uses knowledge and energy of a large, diverse group in the greater Pacific Northwest who impact and care about air quality**
- **Involves people up front so they will own the outcome**
- **Breaks out of “government in charge” towards true collaboration--shared leadership**

# Summary - Washington DoE

- **Active Participation**
  - Early action issues and Characterization Study
- **Significant Early Actions**
  - Low sulfur fuels, fleet retrofits and air toxics studies that fit within Washington priorities to address fine particulates and hazardous air pollutants



# Summary - B.C. Ministry of WLAP

- **Active Participation**
  - Early action issues and Characterization Study
- **Significant Early Actions**
  - Support all the actions as consistent with our interests
  - Actions like HDV IM and low sulphur fuel offer opportunities to share best practices
  - New source review should lead to better future practices, and possible efficiencies
  - Areas like marine vessels can best succeed at a regional scale, and have symbolic as well as practical significance

# General Summary

- Air quality conforms with standards, but still impacts on public health. Visibility is a major concern
- Emission reductions from cleaner motor vehicles may be overwhelmed by rapid growth in the region
- GB/PS International Airshed Planning is supported by all levels of government, NGOs and the public
- Science, modeling and management strategy will be completed by mid-2004

