



**NW-AirQuest**

**Northwest Regional  
Modeling Consortium**

**An M.C. Escher Drawing**

# The Problem

- **General confusion about NRMC vs. NW-AIRQUEST**
  - **Meteorology / Air Quality**
  - **Funding / Collaboration**
- **WA/OR/ID/EPA-R10 Air Directors say NW-AIRQUEST when then talk about their funding for UW and WSU**

# NRMC Charter

## NORTHWEST REGIONAL MODELING CONSORTIUM CHARTER

January 22, 2004  
as revised October 2, 2008

RECEIVED  
OCT 28 2009  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE A Q PROGRAM

### Introduction

In the early 1990's a group of Pacific Northwest air quality and weather prediction agencies began a collaboration to improve local weather forecasts by funding the installation and operation of a radar wind profiler to obtain upper air data in the Puget Sound region. By 1995 this consortium of agencies sponsored the development and implementation of an operational weather prediction system using a high resolution mesoscale meteorological model. Recognizing the significant benefits derived from this initial prediction system, the consortium has continued to collaborate and cooperatively fund the further development and expansion of the system. The consortium prediction efforts continue to grow with greatly expanded domains and products. Membership is dynamic but generally stable. New members are anticipated, and in an effort to hold down costs, a new mechanism has been created to permit access to gridded data to private sector interests and other non-member organizations for a fee. This charter describes the purpose of the Northwest Regional Modeling Consortium (NRMC), and the framework within which it functions to achieve this purpose.

### Purpose

The Northwest Regional Modeling Consortium facilitates collaboration among interested agencies to:

- improve local and regional environmental forecasts through the development, implementation, and evaluation of high resolution mesoscale models for operational use
- provide high quality mesoscale meteorological predictions and data bases to support environmental management and policy decisions in the Pacific Northwest, primarily Idaho, Washington and Oregon.
- provide user-friendly, web-based, interactive graphical and text displays of data and model products
- coordinate with other regional modeling groups and organizations, as appropriate.

# NRMC Charter

## **Funding**

Funding for the Consortium activities by interested government agencies and entities will be voluntary. This funding will support the core activities necessary to produce mesoscale meteorological predictions and grids. Individual members may also enter into support contracts with the University of Washington for new products and projects to take advantage of the Consortium infrastructure. These contracts shall not interfere with meeting routine operational expectations. Members acknowledge that the operation at University of Washington requires sustainable funding to operate and, if necessary, operations or specific projects may be suspended or terminated due to the unavailability of funding.

# NRMC Charter

## Organization and Membership

The Consortium conducts regular quarterly meetings for the purposes of collaboration, sharing relevant technical information, providing direction to funded projects, and conducting business to meet the interests of its members. Special meetings may be called as necessary.

The membership of the Consortium consists of Sustaining Members and Associate Members. A Sustaining Member is defined as an organization that has made regular financial and/or in-kind service contributions, and demonstrates a long-term record of participation in Consortium work. An Associate Member regularly participates in meetings, and makes financial or in-kind contributions on a project-specific basis. In-kind contribution is defined as organizational resources that perform work that results in products that contribute to consortium purposes. An Associate Member may become a Sustaining Member upon affirmation of the Sustaining Members.

### September 1, 2008 Current Sustaining Members:

- Puget Sound Clean Air Agency
- University of Washington/Department of Atmospheric Sciences
- U.S. Environmental Protection Agency, Region 10
- U.S. Department of Commerce/NOAA/National Weather Service
- U.S. Department of Agriculture/Forest Service/PNW Research Station
- Washington Department of Ecology
- City of Seattle/Seattle City Light
- Idaho Department of Environmental Quality
- Oregon Department of Environmental Quality
- Washington State Department of Transportation
- Washington State University/Lab for Atmospheric Research

### Current Associate Members:

- Environment Canada, Pacific & Yukon Region
- British Columbia Ministry of Environment
- U.S. Department of Interior/National Park Service/Pacific West Region

### Past Members:

- Oregon State Department of Forestry
- Port of Seattle
- U.S. Navy
- Washington State Department of Natural Resources

# NRMC Charter

- **Focus on met modeling**
- **Focus on UW**
- **Membership talks about \$\$**
  - **Associate Members have a more collaborative, scientific role but can't vote**

## Issues to be Resolved

- **Met or Met & Air Quality**
  - **Purpose section mixes “regional environmental forecasts”, “mesoscale models”, “mesoscale meteorological predictions”**
  - **Only mentions UW in funding, but WSU is sustaining member**
  - **Morning Air Quality meeting**
- **What role Associate Member plays**

# NW-AIRQUEST Charter

## |1.0 The NW-AIRQUEST Mission

NW-AIRQUEST seeks to develop, maintain, and enhance a sound scientific basis for air quality management decision-making in the Pacific Western Region of North America (encompassing the states of Washington, Oregon, Idaho, Montana, and Alaska in the United States, and the provinces of British Columbia and Alberta in Canada.) This requirement is being approached through collaboration and sharing of experiences to remain abreast of the state-of-the-science and to develop regionally consistent technical approaches for emission inventories, air quality modeling, and air monitoring. NW-AIRQUEST cooperation enhances the effectiveness of member institutions in a mutually beneficial relationship while operating within the resource constraints of each member organization. NW-AIRQUEST collaborates to align science and management needs with the air programs of its member organizations.

# NW-AIRQUEST Charter

## 2.0 NW-AIRQUEST Objectives:

1. Providing sound scientific advice and direction to decision-makers for the management of air quality issues within the Region;
2. Development, operation, and improvement of urban and regional numerical air quality forecast systems to form an archival database of simulated atmospheric data. A key effort will involve coordinating emission inventory and air quality observational databases for model application and evaluation;
3. Development, evaluation, and application of tools for specific measurement and modeling studies to address particular issues, or to answer specific science questions related to air quality in the Pacific Western North America Region;
4. Education, technology transfer, and communication to enhance understanding of current air quality issues, to improve capabilities among all members for using advanced modeling systems to address these issues, and to promote wide-spread communication of methods and results throughout the Region; and
5. Collaboration with other scientific groups, particularly organizations with similar goals in other regions and organizations involved in the science disciplines associated with risk assessment.

# NW-AIRQUEST Charter

## 4.0 NW-AIRQUEST Organization and Membership

NW-AIRQUEST embodies a virtual air quality science center and depends on the active involvement of all its sustaining members. Sustaining members ensure that goals are met through consistent long-term collaboration and collectively seek financial support to meet the basic operation of the virtual air quality science center.

The current sustaining members are:

- \* Environment Canada
- \* BC Ministry of Water, Lands and Air Protection
- \* University of British Columbia
- \* Greater Vancouver Regional District
- \* Idaho Department of Environmental Quality
- \* Oregon Department of Environmental Quality
- \* Puget Sound Clean Air Agency
- \* Southwest Clean Air Agency
- \* University of Washington
- \* U.S. EPA Region 10
- \* USDA Forest Service, Pacific Northwest Research Station
- \* National Park Service, Pacific West Region
- \* Washington Department of Ecology
- \* Washington State University
- \* Oregon Department of Forestry

# NW-AIRQUEST Charter

- **Focus on air quality modeling**
  - But also includes “measurement”, “monitoring”, “education”, “communication”, “risk assessment”
- **No mention of a single university**
- **Bigger than WA/OR/ID State/Local AQ agencies**
  - E.g., UBC, Environment Canada, Oregon Department of Forestry
- **Membership entails collaboration and seeking support**

## Issue to be Resolved

- **How do you develop, operate, and improve an air quality forecast system without discussing funding?**
  - Is this about \$\$ or not?

# What is Needed

- **Consistent use of name**
- **Clear definitions for group scope**
  - **Met or Air Quality or both**
  - **Funding or collaboration or both**
- **Clear definition of sustaining membership**
- **Clear benefits and responsibilities of membership categories**