





Let's Keep it Clean

Air Lines is back!

As you've gone about your busy life during the last year and a half, some of you may not have even noticed that you weren't receiving Air Lines anymore. However, many of you did notice, and we received quite a few calls and emails asking what happened to the Department of Ecology's Air Quality Program newsletter. Air **Lines** was discontinued in the fall of 1999 due to budget constraints, but has now been resumed on a limited basis. Air Lines will no longer be published quarterly, but will be issued as needed to provide information about air quality issues you might not receive by other means.

If you would like to receive Air **Lines** electronically, please email tdah461@ecy.wa.gov, noting that you would like to be on the electronic mailing list for Air **Lines**. Give your name and mailing address, and provide the correct email address.

If you have questions or comments, please leave a brief message at the above email address or phone: (360) 407-6830. If you are requesting to be removed from our mailing list, please include your name and address in your message.

An air quality update

As a recent transplant from Los Angeles to Washington put it, "How can you tell when the air is clean up here, when you can't even see it?" Well, it may take a slight period of adjustment, but eventually people get used to our invisible air here in Washington. Most people even like it that way. And the people at the Department of Ecology's Air Quality Program spend a great deal of time and effort trying to keep it that way. This isn't always an easy task, given our growing population and the many seemingly innocent things we do that pollute the air – using wood stoves and fireplaces, burning outdoors and, especially, driving cars.

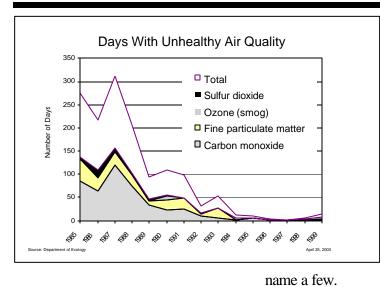
Whether you prefer to see the air you breathe or not, you may be interested in knowing how clean the air is in various areas of Washington. To provide you this information, the Air Quality Program has published its most recent Air Quality Trends Report, which includes information on air pollution levels in monitored areas of the state during 1999. This report also gives an update on

various issues and activities that have recently taken center stage on Washington's air quality scene. The report is available on the web at http://www.ecy.wa.gov/programs/air /downloadable air quality reports.h tm, or by calling (360) 407-7472 for a hard copy (reference publication #00-02-011).

How clean is Washington's air?

Although we still have some areas that do not meet federal healthbased clean air standards, air quality in Washington has been steadily improving. The number of days Washington violated air quality standards has seen a dramatic decrease over the years, from 150 days in 1987 to seven days in 1999. (See the chart on the following page.)

In addition, the number of people in Washington exposed to air that violates federal standards has dropped from a high of more than two million people in 1990 to about 112,000 people in 1999.



industry have improved, fewer people have been choosing to heat their homes with wood, and outdoor burning is allowed in fewer areas, to

standards. The photo below shows one of Washington's monitoring sites. The number and location of air monitors may change each year based on measured pollution levels, changes in air pollution sources, federal and state priorities, and available resources.

What causes Washington's air pollution?

The main sources of air pollution in Washington are, respectively, motor vehicles, industry, wood stoves and fireplaces, and outdoor burning. Other sources include lawnmowers, boats and other recreational vehicles, aircraft, and trains.

Although these sources have remained largely the same over the years, the amount of air pollution they contribute has shifted. For example, 10 years ago, in 1991, motor vehicles caused 43 percent of Washington's air pollution, and industrial emissions were responsible for 25 percent. Wood stoves contributed 20 percent, and outdoor burning 10 percent. Compare those figures to 1999's emission percentages shown in the chart at right, and you'll notice a significant increase in air pollution from motor vehicles and a decline in pollution caused by industry, wood stoves, and outdoor burning. This shift may be due to a number of different factors: Washington's population has grown, more people are driving, air pollution control technologies for

How do we know how clean the air is?

Looks can be deceiving. Sometimes you can tell the air is dirty by the haze you see, or just by your inability to see familiar landmarks. But air pollution can't be accurately measured that way. Even when the air looks relatively clean, air pollution can be present. Ecology and local air quality agencies monitor around the state for six air pollutants: particulate matter, carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and lead. These are the air pollutants for which the federal Environmental Protection Agency (EPA) has set human health

Air Pollution Sources in Washington Statewide - Annual Average Motor Vehicles 17% 11% 57% Other Noodstoves/Fireplaces Outdoor Burning

What happens if the air gets too dirty?

If levels of an air pollutant violate an air quality standard somewhere in the state, EPA designates the area as "nonattainment" for that specific standard. The state must then develop and implement a plan to bring air pollution back to healthier levels, and keep it that way.

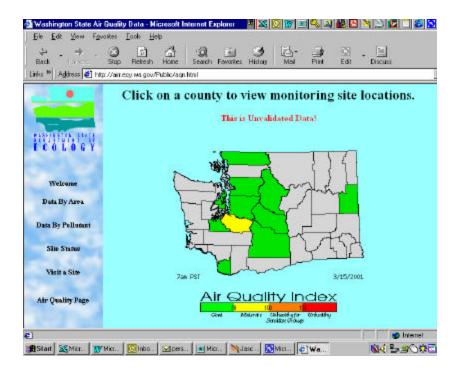
A nonattainment designation has serious consequences, aside from unhealthy air. New or expanding businesses that release air pollution in nonattainment areas must apply the most strict and costly controls available. This often results in higher costs, less likelihood of investment in new facilities, and a slower economic climate. And it isn't just the business community that is affected. For example, the Puget Sound area is currently meeting the standard for ozone by a very thin margin. If this area were to return to

nonattainment, drivers would be required to use cleaner gasoline in order to help reduce ozone levels. This could cost consumers an extra one cent per gallon, adding up to a total of more than \$10 million per year.

How can you find out what the air quality is like where you live?

One of the most frequent questions we get from the public is "How good (or bad) is the air in my neighborhood?" While we can't get quite that specific, the Air Quality Program does have quite a bit of data on air quality in various areas of Washington. For real-time, up-to-the-minute information on air pollutant concentrations in many Washington counties, visit http://airr.ecy.wa.gov/Public/aqn.htm I on the web. This site shows pollutant levels at monitored sites

over the most recent 72 hours. The data is updated every hour. Although the site only has information for areas of the state with air monitors that are connected to Ecology's data center, it still provides a good view of air quality in Washington. Users can get data either by area or by pollutant, and can also visit a specific monitoring site to get the latest data collected there. Information is as easy to get as clicking on the county you're interested in, as shown at below left in a sample of a page from the site. If you do visit the site, be aware that the data shown is intended only as an indicator of current air quality, and is not yet "official." To be considered official, the data we receive from air monitors must go through a quality assurance process.



Drought = Dust

Since Governor Locke declared the state of Washington in a drought, many people have been thinking ahead to potential summer water shortages and related problems. Less obvious, but also important to our health and welfare, are the air quality consequences of drought.

Think about driving down a dirt road or driveway on a hot, dry summer day in a year that has had normal rainfall. Visualize the dust your car stirs up as you drive. Then, imagine the potential for dust this summer, when many areas of our state have experienced at least 50 percent less than average rainfall.

Dust, even just dirt or rock dust, is bad for our lungs, and especially bad for elderly people, children, and people with respiratory conditions. Dust is created by numerous activities including land clearing and construction, farming, and hauling gravel, topsoil, and other materials. Even your own little vegetable garden can generate a sizeable amount of dust, given enough wind.

It is illegal to cause dust that is detrimental to the health, safety, or welfare of people, or that damages a business. That means we need to control dust, even during hot, dry, windy weather. So, what should you do? Two words: *Plan ahead!*

If you're clearing land, plan for how you'll control the dust before you start the work. Don't clear any more land than you have to, and do your work in phases to minimize the

amount of exposed area. When driving, reduce your vehicle speed on dirt roadways. Pay attention to weather forecasts and be aware that dry conditions coupled with wind could mean more severe dust problems. Try to curtail activities that cause dust as much as possible during this kind of weather.

If you usually use water to control dust, remember there may be less of that precious resource available this summer. Consider using a chemical dust suppressant to stretch your water. Some of these products allow you to apply water less frequently and in smaller quantities. Gravel can also be used as a dust suppressant. (Remember never to use oil to suppress dust – it leaches into the surrounding soil and can contaminate both soil and groundwater.)

Another consequence of drought is the increased risk of wildfires. Low snowpack and dry forests and range lands could mean an early start to the fire season. Tune to local radio stations for updates on local smoke conditions if there are wildfires near you.

If you have respiratory or heart disease, discuss with your doctor the protective measures you should take in case of dust or smoke problems. Close up your house during dust or smoke alerts, and run summer fans or use room air filters if available. In most cases, staying indoors reduces the exposure to dust or smoke, but some people may need to have medication or respirators available. Some individuals may wish to plan to evacuate an area affected by dust or smoke.

As always, be considerate of your neighbors and their health. Think about how your activities may affect them before you plow up your lawn or bring in a load of topsoil.

Take our web survey!

We want to know what you think about air quality problems, programs, and issues. If you have internet access, please take a few moments to respond to our web survey at http://survey.sesrc.wsu.edu/airq/. We want to hear from you!

Air Lines is the newsletter of the Department of Ecology's Air Quality Program. It offers updated information on air quality issues, programs, and activities in Washington. Air Lines welcomes your comments. Questions and contributions should be directed to:

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