The U.S. Environmental Protection Agency has proposed a stronger health-based standard for ground-level ozone. This Q & A helps explain what the change would mean:

**What is ozone and why should we care about it?**

Breathing ground-level ozone can trigger a variety of health problems including chest pain, coughing, and throat irritation. It can worsen bronchitis, emphysema, and asthma. Ground-level ozone also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. Even small amounts in the air can have harmful effects.

Ozone is formed when chemicals from tailpipes and smokestacks react with sunlight. That's why ozone levels are at their highest during the summer in most parts of the country. Summertime is also when people are more active and spend more time outdoors, resulting in increased ozone exposure.

Ground-level ozone levels in the Northwest Clean Air Agency's jurisdiction – Island, Skagit, and Whatcom counties – are well within new limits proposed by EPA, but that's not the case for all parts of the state. NWCAA is investigating whether activity in its jurisdiction is contributing to ozone problems in other areas.

**Can ozone be both good and bad?**

Ozone can have good or bad effects, depending on where it's located in the atmosphere.

Close to the Earth's surface, ground-level or "bad" ozone is harmful to breathe and can damage crops, trees, and other vegetation. It is a main ingredient of urban smog. High
up in the atmosphere, stratospheric or “good” ozone protects life on Earth from the sun's harmful ultraviolet rays.

One way to remember whether ozone is “good” or “bad” for us is, "good up high, bad nearby."

**Why did EPA release a new draft standard now?**

EPA is in the process of strengthening the ozone standard to be more protective of public health and the environment.

Under the Clean Air Act passed by Congress, EPA is required to review the health standards for certain pollutants every five years. As part of that review, EPA convenes a group of independent scientific advisors, called the Clean Air Scientific Advisory Committee (CASAC), to review the latest health information and make a recommendation.

Most recently, CASAC advised EPA that the current standard of 75 parts per billion (ppb) is not fully protective of public health and recommended a new stricter standard between 60 and 70 ppb. The committee also expressed concerns that setting the standard at the high end of that range (70 ppb) might not provide an “adequate margin of safety” as required by the Clean Air Act.

**What happens next?**

EPA will consider public comments on the proposed standard range and release a final standard in the fall of 2015. At that time, state and local clean air agencies will review their air quality data to see if the areas they serve are meet the new standard, or may be contributing ozone to areas that exceed the allowable standard. EPA reviews the state recommendations and designates areas as either in compliance or not. Areas that are not in compliance (called nonattainment areas) are required to meet the standard as soon as possible. How long an area has to reduce ground-level ozone is based on how severe their ozone pollution problem is.

**What is the effect of being in “nonattainment”?”**

Besides the impacts on people’s health, nonattainment areas must, in some cases, require stricter pollution controls on sources of the chemicals that cause ozone pollution. This results in higher costs for the additional air pollution controls required, as well as costs for emission offsets for major new sources and costs for vehicle-inspection programs in the nonattainment area.

In addition, areas that take too long to clean up the problem can lose federal highway funding or be required to use those funds only on projects that don’t add to the pollution problem. Congress put both these potential consequences into the Clean Air Act to encourage states to move quickly to reduce ground-level ozone.
Is our area likely to be out of compliance?

Whether we’re talking about ozone or other pollutants for which there are state and national standards, the air quality in Island, Skagit, and Whatcom counties is very healthy most of the time. Ozone levels and other pollutant levels are very low here.

However, in addition to local ozone levels, states must consider whether ozone-forming chemicals released in one area are contributing to ozone pollution in another area when making recommendations to EPA about potential areas of noncompliance.

Some areas of Washington are known to have periods of elevated ozone. In anticipation of the proposed new ozone standard, NWCAA, the Puget Sound Clean Air Agency, and the Washington Department of Ecology are studying whether ozone-forming chemicals released locally are contributing to ozone problems elsewhere.

What can I do to help reduce ozone pollution?

We can all take steps to help reduce the chemicals that cause ozone to form. Carpooling, filling your gas tank after dusk and not topping off your tank can all help.

NWCAA will continue to do its part to ensure industry emissions remain low.

Does EPA look at the costs of a new standard?

Under the Clean Air Act, (as interpreted by a unanimous Supreme Court decision), EPA cannot consider the costs when setting the ozone standard. EPA can and does consider costs in reviewing the best, cost effective ways for states to reduce emissions that cause ozone to form in order to meet any new standard.

During the last 40 years, the benefits under Clean Air standards from reduced loss of life, increased productivity and reduced health care costs have far outweighed the costs of stricter standards.

While some groups have complained about the costs of air pollution standards, there is a history of innovation under the Clean Air Act. This consistently results in much lower costs of compliance than projected by industry groups when the standards are first proposed or released.

Where can I learn more about ozone?

- EPA news release: EPA Proposes Smog Standards to Safeguard Americans from Air Pollution
- EPA ozone information: Good Up High Bad Nearby
- Washington Department of Ecology video
2013 Measurements of Ground Level Ozone Air Quality.

source: http://www.epa.gov/oar/trends/values.html

Ozone ppb levels

- <61 (Complying with any new Standard)
- 61-65 (Possible Non-Attainment)
- 66-70 (For New Standard)
- 71-75
- 76-84 (Violating the 2008 Standard)
- ≥85 (Violating the 1997 Standard)