G3: 3.3 Increase percent of population living where air quality meets federal standards from 92% to 100% by 2020

Why is this a priority?

Violations of national air quality standards affects both public health and the economy. US EPA has set ambient air quality standards for six pollutants; ozone, fine particulate, nitrogen dioxide, carbon monoxide, sulfur dioxide and lead. Ecology conservatively estimates that just one pollutant, fine particles, causes more than 1,100 deaths each year (more than twice the annual loss of life from automobile accidents). Fine particles also costs close to $200 million each year in direct and societal costs of disease in Washington. Violation of federal air standards, known as "non-attainment," imposes significant economic and environmental limitations, requirements, and potential sanctions on the state, businesses, and residents in affected communities.
How are we doing?

All areas in Washington State currently meet all six federal air quality standards. However, there are seventeen areas in Washington that risk violating federal air quality standards. Fifteen communities in Washington experience high levels of fine particles (PM2.5) pollution including one community that also has high levels of larger particles (PM10) pollution. Two additional communities measure high levels of ozone pollution. Violations of federal air standards expose the public to harmful air pollution, cause economic impacts to businesses and citizens, and result in EPA action.

Areas of Concern for PM$_{2.5}$ and Ozone

What are we working on?

Statewide

We need expanded technical analysis and greater community engagement in the 17 areas (15 fine particles with one larger particles, and two ozone) to prevent violation of the national standards. Ecology’s pilot project in Ellensburg shows promise and models a successful approach for community involvement/interaction.
At Ellensburg, the Local Health Department formed an Advisory Committee with broad stakeholder representation to prevent violation of the air quality standard for fine particulate matter (PM2.5). The Ellensburg Prevent Non-attainment project has made significant progress in empowering the local leaders to steer their own air quality future. Accomplishments include two community assessments, a targeted education program, and statistical results demonstrating increased knowledge and understanding stemming from the education program. Currently, the committee intends to join EPA’s PM2.5 Advance Program, and to create 5-year plan to prevent non-attainment.

Omak initiated a similar effort to prevent non-attainment of ambient air quality standard for fine particles. Ecology is also working with Colville on sustainable solutions to prevent violation of the ambient air quality standard for coarse particle matter (PM10), primarily caused by re-entrainment of road traction sand.

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**Tacoma**

Washington’s Department of Ecology and Puget Sound Clean Air Agency worked together on initiatives that improved air quality in Tacoma. Ecology submitted a formal plan to EPA demonstrating that the area now meets the federal air quality standard for fine particle pollution. EPA approved the plan in February 2015 and officially classified the area as meeting federal standards.

The solution for Tacoma included:

- Replaced thousands of older, more-polluting wood stoves with cleaner home-heating alternatives.
- Instituted more effective burn restrictions to prevent pollution levels from exceeding the standards.
- Educated policy makers and public about particle pollution and how burning behaviors can affect their neighbors and community.
- Increased inspectors in-field who investigate and ensure burn restrictions compliance.
- Banned the use of uncertified wood stoves after September 2015.

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**Puget Sound and the Tri-Cities**

In October 2015, EPA strengthened the National Ambient Air Quality Standard for ground-level ozone from 75 to 70 parts per billion (ppb). The Puget Sound region and the Tri-Cities risk violating the stronger ozone standard. Ecology is working with Puget Sound Clean Air Agency, Northwest Clean Air Agency, and Benton Clean Air Agency to better understand emission sources and identify potential strategies to prevent a future violation.

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**How can you help?**
Citizens can help reduce fine particle pollution in their communities by:

- Learning about the [health effects of fine particle pollution](#).

- Following the instructions for properly using wood-burning devices and only burning dry, well-seasoned fuel wood. Watch this [helpful video](#).

- Complying with burn bans as soon as they are issued. Learn more or sign up for [burn ban notifications](#).

- Upgrading older uncertified wood-burning devices to cleaner alternative heat sources. [Contact your local clean air agency or the Department of Ecology](#).

Citizens can help reduce ozone pollution by:

- Learning about the [health effects of ozone pollution](#).

- Reduce vehicle trips by carpooling, using transit options, efficiently planning your errands, walking and biking.

- If shopping for a new vehicle, buy the most fuel-efficient and lowest pollution car/truck that meets your needs.

- Maintain your car to manufacturer specifications, and have it tested if you live in one of [Washington's Emission Check areas](#).

- Avoid mowing your lawn and using other gasoline-powered landscape equipment on very hot days.

**Action Plan:**
<table>
<thead>
<tr>
<th><strong>Problem / Opportunity</strong></th>
<th><strong>Strategies</strong></th>
<th><strong>Task</strong></th>
<th><strong>Due Date</strong></th>
<th><strong>Status</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain compliance in Tacoma/Pierce County with the national ambient air quality standards for fine particle pollution. The pollution is primarily caused by high volumes of smoke from wood stoves and fireplaces during winter-weather inversion events.</td>
<td>Improve public education in Tacoma/Pierce County about the health effects of fine particle pollution, behaviors that contribute to the problem, fine particle pollution impacts on the community and the reasons for abiding by burn bans.</td>
<td>Ensure continued/expanded use of multi-media outreach for burn ban notifications, including television, radio, print, web, listservs, social media, robocalls, etc.</td>
<td>12/31/2016 12:00:00 AM</td>
<td>On-Track</td>
</tr>
</tbody>
</table>

**Supplemental Information:**

[Air Quality Presentation to Governor - April 2015](https://data.results.wa.gov/reports/Copy-of-G3-3-3-Population-nonattainment--1)