



Testimony In Support of
DEQ Policy Option Package 114

To Reduce Harmful Wood Smoke Pollution,
Improve Public Health, and Maintain NAAQS Compliance

Joint Ways and Means Sub-Committee on Natural Resources
February 21, 2019

In August 2014, DEQ officials in Portland alerted Washington County that we were at risk of violating the National Ambient Air Quality Standards. One of the primary concerns, we learned, were the high levels of fine particulate matter (PM 2.5) measured at two DEQ monitoring stations, located in a popular city park in central Hillsboro, and at a public school site in central Beaverton.

While there are many sources for this fine particulate matter, much of the problem in Washington County can be linked to wood smoke---wafting into the Tualatin River basin from slash burns and orchard trimming in rural areas of our County, leaf burning and backyard burn barrels commonly used at the time in several cities, as well as from wood stoves and fireplaces in homes and businesses throughout the county.

Washington County is certainly not the first in Oregon to be faced with the prospect of non-compliance. We looked to Klamath County in Oregon, Pierce County in Washington, and to the cities of Oakridge and Lakeview, to learn what we could do to stay in compliance, protect public health, and maintain the economic vitality of our communities.

The first steps we took, centered on a public education campaign, asking residents to avoid burning leaves or using backyard burn barrels, and using their wood stoves and fireplaces unless these were their primary sources for heat. Local Boy Scout troops were enlisted to distribute some 10,000 door hangers, asking residents in selected neighborhoods to avoid burning on stagnate winter days---when cold air in the Tualatin Basin trapped the wood smoke over these populated areas.

In 2016, Washington County teamed with ^{public and private partners} ~~_____~~ to launch a wood stove exchange program. The goal was to replace 700 old and uncertified wood stoves with new and cleaner heat sources, including wood and pellet-burning stoves, gas furnaces and electric heat pumps.

In the first 28 months of our program, over 560 applications were received, and a total of 333 exchanges had been completed by December 31, 2018. These change outs are credited with preventing more than 24 tons of particulate matter (PM 2.5 and PM 10) and more than 139 tons of hazardous air pollutants and gases from being discharged into our local air shed. But these change outs are having the additional benefit of improving the comfort and *interior* air quality in the homes of our low-income and fixed-income recipients of these cleaner, more efficient heat sources.

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So we believe Washington County's wood stove exchange can serve as a model for similar exchange programs throughout our state. We have demonstrated the obvious benefits of developing and implementing these programs, policies, and strategies in the communities where they are needed. We also support DEQ's long-standing practice of providing "block grants" to communities around the state where the needs are greatest.

Unfortunately, as our state was digging out from the recession, DEQ's funding sources were reduced in 2011, and have never been fully restored---providing only \$170,000 per biennium in subsequent years---while the number of communities needing this support has been increasing.

An Oregon legislative task force came to similar conclusions in 2016. So in 2017, Oregon lawmakers approved a one-time allocation of \$250,000 to help local communities reduce wood smoke pollutants. Washington County supported that appropriation, and agreed to have DEQ allocate this money to smaller communities such as Oakridge, Lakeview, and Prineville, where the needs were immediate, but financial resources have been limited.

Building on the success from that 2017 one-time appropriation, DEQ was requesting \$500,000 from General Funds to support local programs that reduce wood smoke. But that amount was trimmed from the Governor's Recommended Budget.

Washington County enthusiastically supports the agency's original request, and urges your Committee's support for DEQ's efforts to help communities across our state comply with the National Ambient Air Quality Standards.

DEQ's Policy Option Package 114 (copy attached) offers immediate benefits to public health and air quality for all Oregonians---and especially for low-income and elderly residents---by providing local communities with the financial resources and expertise to implement effective wood smoke reduction programs.

We appreciate your attention and consideration of the DEQ's programming and funding requests these past few days, and urge your support for our continued efforts to reduce wood smoke pollution, outlined in Policy Option Package 114.

For additional information, please contact

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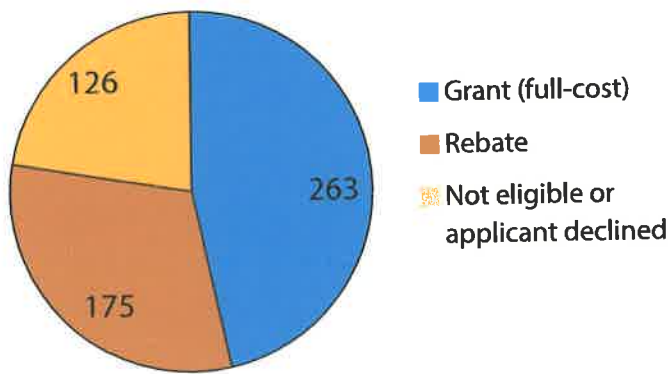
Progress Report #10

Aug. 24, 2016 – Dec. 31, 2018

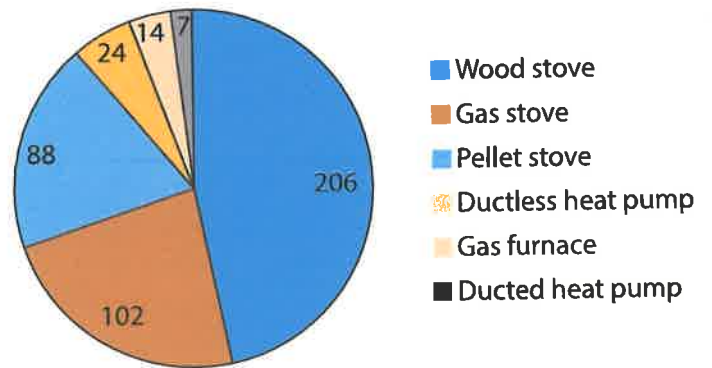
The Washington County Wood Stove Exchange is a collaboration between the Department of Health and Human Services and the Office of Community Development. The program, which was launched on August 24, 2016, replaces old and uncertified wood stoves with new and cleaner heat sources, including certified wood and pellet stoves, gas stoves and electric heat pumps. More information is available at www.WoodStoveExchange.com.

Over 560 applications have been received, with 333 exchanges completed. These exchanges have prevented more than 24 tons of particulate (PM2.5 and PM 10) and more than 139 tons of hazardous air pollutants and gases. Q4 saw the ramp-up of the indoor air quality study from the Oregon DEQ grant in collaboration with Portland State University. The data generated from this study is expected to quantify the indoor air pollution exposure implications of wood stove exchange programs in Washington County, and to provide a model for expansion of indoor and outdoor air quality monitoring for similar exchange programs in Oregon. Lastly, additional funds are being distributed to rebate participants in Forest Grove, provided by the City of Forest Grove Community Enhancement Program.

Total Applications Received: 564



Preferred New Heating Source*



*Does not include ineligible projects

Location	Requests	Installations
Aloha	50	31
Banks/Buxton/Manning/Gales Creek	21	10
Beaverton	101	59
Cornelius	37	24
Durham	1	1
Forest Grove	34	17
Gaston	27	17
Hillsboro	183	104
North Plains	14	7
Portland (Unincorp. WC)	37	22
Sherwood	10	8
Tigard	40	29
Tualatin	9	4
Totals	564	333

General Data

Completed initial assessments.....	503
Projects in progress	59
Completed exchanges.....	333

Pollutant Emissions Prevented	Tons
PM2.5 + PM 10	24.34
Carbon Monoxide (CO)	89.02
Methane	24.9
Volatile Organic Compounds (VOCs)	22.04
Total HAPS (Hazardous Air Pollutants)	2.07
Sulfur Dioxide (SO2)	0.12
Nitrogen Oxides (NOX)	0.96
Total emissions prevented	163.44

From U.S. EPA Emissions Calculator

POLICY OPTION PACKAGE 114 NARRATIVE

**TITLE: REDUCE HARMFUL WOOD SMOKE POLLUTION
PRIORITY RANK – GENERAL FUND: 13**

PURPOSE

The purpose of this package is to support local efforts to reduce wood smoke in communities that are violating, or are at risk of violating, federal air quality standards.

Residential wood smoke from stoves and open burning is a known source of fine particulate pollution and air toxics. Exposure to fine particles is associated with a range of health effects including heart or respiratory problems and premature death. Air toxics can pose a significant risk to public health including an increased risk of cancer, immune system damage, nerve damage, birth defects, respiratory diseases and other health problems. In addition to the public health effects, residential wood smoke is the single largest source of contaminants in Oregon communities that already violate the federal health standard for fine particulate (soot/smoke).

EPA designates areas that don't meet national ambient air quality standards as "nonattainment." Having EPA declare a community as nonattainment is serious. The designation means that the air is unhealthy; triggers legal requirements to reduce pollution and meet standards; results in stricter requirements imposed on new and potentially existing industry; and can be a deterrent to attracting new business and new residents. Currently, Klamath Falls and Oakridge have designation as nonattainment for violating the federal daily fine particulate standard. Lakeview, Prineville, Medford, Eugene, Hillsboro, La Grande and Burns are at risk of exceeding federal fine particulate standards.

As directed by House Bill 3068 (2015), DEQ convened a diverse 22-member workgroup to study approaches to reducing residential wood smoke and to provide recommendations for legislative action. The highest priority recommendation was to increase the level of support DEQ provides to local communities around the state to reduce wood smoke. Locally run wood smoke reduction programs reduce particulate emissions and are required in some former nonattainment communities under their federally approved clean air plans. Local communities understand the challenges of their area,

and are best situated to craft effective wood smoke reduction programs specifically tailored for their residents.

For the 2017-2019 biennium, DEQ has \$172,000 available to support local programs to reduce wood smoke, an amount inadequate to meet the statewide need. Recognizing this, the 2017 Legislature authorized a one-time investment of \$250,000 for DEQ to pass-through to local communities. Communities have used the funds for a variety of wood smoke reduction projects, including:

- Supporting personnel in local governments to forecast air quality conditions and enforce wood burning restrictions.
- Evaluating the health impacts from wood smoke and the benefits of wood stove replacement programs.
- Developing and disseminating educational materials focused on burning techniques that minimize smoke impacts.

HOW ACHIEVED

Building on the successes achieved through the 2017 one-time appropriation, this package requests \$500,000 in General Funds to fund programs to reduce wood smoke. DEQ developed the request in collaboration with local governments across the state to provide communities already designated nonattainment or identified as at-risk of such designation with additional funds to help implement their programs. This package will benefit Oregonians' health and the environment by ensuring that communities affected by fine particulate:

- Have the resources and expertise to fully implement wood smoke reduction programs to better protect public health, particularly for vulnerable populations such as young children and the elderly.
- Achieve attainment or prevent the community from violating the fine particulate standard and lower air toxics emissions, ensuring a clean air and allowing for economic growth.
- Coordinate with state and local partners to address wood smoke, and find and pursue grants and additional funding to supplement wood smoke reduction programs, such as woodstove change outs.
- Support environmental justice by helping communities identify and support households whose private resources are insufficient to take measures such as woodstove change outs, yielding health benefits for the particular household as well as for the community at large.