



Wood Stove Standards Agency Request Legislation

An Environmental Justice Assessment (per RCW 70A.02.060)

By

Joanna Ekrem and Whitney Oswald

For the

Air Quality Program

Washington State Department of Ecology
Olympia, Washington

September 2024, Publication 24-02-041

Contact Information

Air Quality Program

P.O. Box 47600

Olympia, WA 98504-7600

Phone: 360-704-0514

Email: Joanna.Ekrem@ecy.wa.gov

Website¹: [Washington State Department of Ecology](http://www.ecology.wa.gov)

ADA Accessibility

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 360-704-0514 or email at Joanna.ekrem@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

¹ www.ecology.wa.gov/contact

Language Access

Under the state Environmental Justice law (RCW 70A.02), Ecology is required to conduct Environmental Justice Assessments during development of certain significant actions. This Assessment provides information about the potential impacts to overburdened communities and vulnerable populations, and strategies to mitigate identified harms and fairly distribute known benefits. For translation, interpretation, or accessibility assistance, please contact Courtney Cecale at courtney.cecale@ecy.wa.gov or (360) 480-6270.

Bajo la ley estatal de Justicia Medioambiental (RCW 70A.02), Ecología está obligada a realizar Evaluaciones de Justicia Medioambiental durante el desarrollo de ciertas medidas importantes. Esta evaluación proporciona información sobre los posibles impactos en las comunidades sobrecargadas y las poblaciones vulnerables, y las estrategias para mitigar los daños identificados y distribuir justamente los beneficios conocidos. Para asistencia de traducción, interpretación o accesibilidad, por favor póngase en contacto con Courtney Cecale escribiendo a courtney.cecale@ecy.wa.gov o llamando al (360) 480-6270.

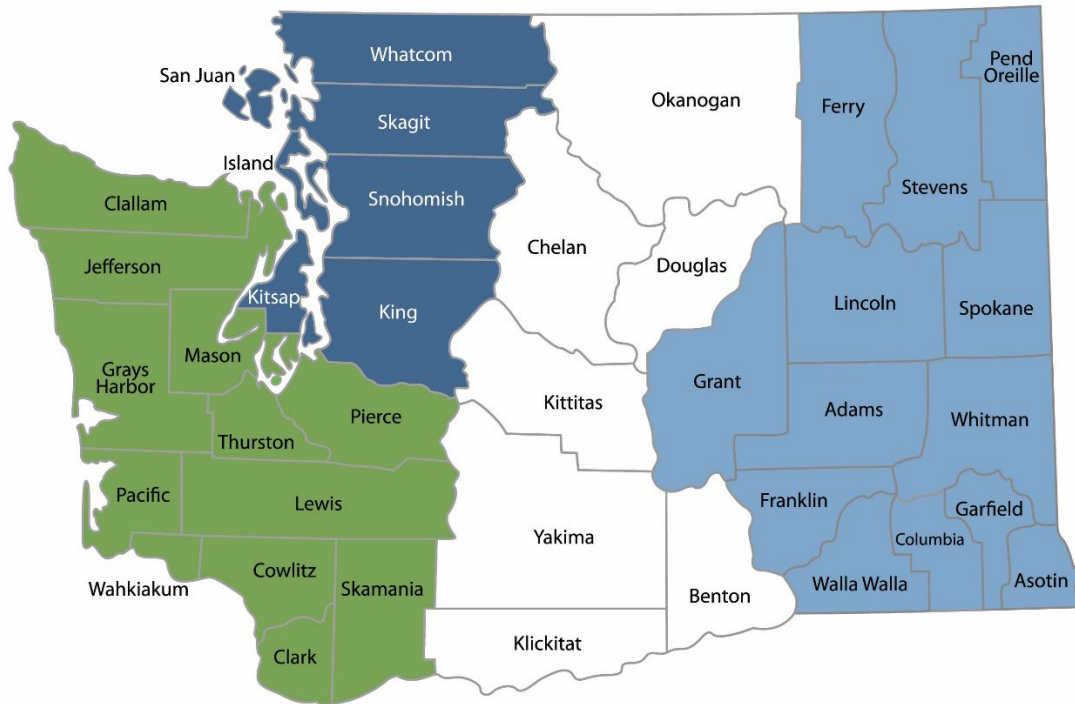
根据华盛顿州环境正义法([RCW 70A.02](#))，生态管理署在制定某些重大行动时必须进行环境正义评估。该评估需提供对负担过重社区和弱势群体潜在影响的信息，以及减轻已明确的危害和公平分配已知利益的策略。如需笔译、口译或无障碍协助，请联系 Courtney Cecale，电子邮件：courtney.cecale@ecy.wa.gov或电话 (360) 480-6270。

Theo luật Công Bằng Môi Trường của tiểu bang (RCW 70A.02), Bộ Môi Sinh được yêu cầu tiến hành Đánh Giá Công Bằng Môi Trường trong quá trình triển khai một số hành động quan trọng. Đánh giá này cung cấp thông tin về các tác động tiềm ẩn đối với các cộng đồng đang chịu tổn hại và các nhóm dân cư dễ bị tổn hại cũng như các chiến lược nhằm giảm thiểu tác hại đã xác định và phân chia công bằng các lợi ích đã biết. Để được hỗ trợ về thông dịch, giải thích hoặc sự giúp đỡ cho người khuyết tật, vui lòng liên hệ với Courtney Cecale theo địa chỉ courtney.cecale@ecy.wa.gov hoặc (360) 480-6270.

주 환경부는 중요한 조치를 계획할 때 환경 정의 평가를 수행해야 합니다. 이 평가는 취약계층 지역사회와 취약인구에 대한 잠재적 영향 관련 정보와, 확인된 피해를 완화하고 알려진 혜택을 공정하게 분배하기 위한 전략을 제공합니다. 번역, 통역, 또는 장애인 서비스 지원은 담당자 (Courtney Cecale)에게 이메일 courtney.cecale@ecy.wa.gov 또는 전화 (360) 480-6270으로 문의하십시오.

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400
---	---	---------------------------------------	---------------------------------------

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 West Alder Street Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 North Monroe Spokane, WA 99205	509-329-3400
Headquarters	Statewide	P.O. Box 46700 Olympia, WA 98504	360-407-6000

Wood Stove Standards Agency Request Legislation

An Environmental Justice Assessment (per RCW 70A.02.060)²

Air Quality Program
Washington State Department of Ecology
Olympia, WA

September 2024 | Publication 24-02-041



DEPARTMENT OF
ECOLOGY
State of Washington

² <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02&full=true#70A.02.010>

Table of Contents

List of Figures and Tables	6
Figures.....	6
Executive Summary.....	7
Environmental Justice Assessment	8
<i>Purpose of the Environmental Justice Assessment</i>	<i>8</i>
Section 1: Background.....	10
Section 2: Notification that an Environmental Justice Assessment has been Initiated.....	11
Section 3: Identify Affected Tribes.....	11
<i>Preparing for Tribal Consultation.....</i>	<i>11</i>
Section 4: Offer Consultation:	12
Section 5: Summary of Tribal Consultation & Engagement.....	12
<i>Summary of Tribal Consultation</i>	<i>12</i>
Section 6: Identification of Overburdened Communities & Vulnerable Populations.....	14
<i>Identify Overburdened Communities and Vulnerable Populations</i>	<i>14</i>
Section 7: Summary of Community Engagement.....	21
<i>Summarizing Community Engagement.....</i>	<i>22</i>
Section 8: Potential Environmental Benefits & Harms from Action.....	23
<i>Identify Potential Environmental Benefits & Harms from Action</i>	<i>23</i>
Section 9: Options to Eliminate, Reduce, or Mitigate Harms and Equitably Distribute Benefits.....	25
<i>Identify Options to Eliminate, Reduce, or Mitigate Harms & Equitably Distribute Benefits</i>	<i>25</i>
Section 10: Notification of Completed Assessment	26

List of Figures and Tables

Figures

Figure 1. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in relation to Washington census tracts. 15

Figure 2. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in overburdened communities with Environmental Health Disparity (EHD) ranking of 9 & 10 as identified by Washington Office of Financial Management..... 16

Figure 3. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the “Low income” socioeconomic indicator..... 17

Figure 4. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the “People of color” socioeconomic indicators 18

Figure 5. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the health disparity asthma..... 19

Figure 6. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the health disparity heart disease. 19

Figure 7. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in relation to the 16 Ecology identified overburdened communities highly impacted by air pollution..... 21

Executive Summary

Ecology is proposing agency request legislation to align state emission standards with more protective national standards adopted by the U.S. EPA for wood stoves. This agency request legislation would also address insufficiencies in EPA's certification process by creating a program to ensure that wood stoves sold in Washington are clean burning and comply with emission standards for fine particle air pollution (PM_{2.5}, or particulate matter 2.5 microns or smaller), which is known to harm human health.

Ecology initiated an Environmental Justice Assessment on August 9, 2024, and accepted comments through August 30, 2024. We conducted outreach on this action in the following ways:

- Extended an offer for government-to-government consultation with Tribes on August 14, 2024.
- Contacted and/or met with organizations representing overburdened communities and vulnerable populations.
- Held a listening session on August 26, 2024, and accepted written comments through August 30, 2024.

Ecology does not anticipate any harmful environmental or health impacts from this action. We anticipate that this legislation would result in the following benefits:

- Ensure that new and used wood stoves sold in Washington are clean burning and meet fine particle emission standards.
- Improve air quality for low-income households and urban and rural communities that rely more heavily on wood for home heating and reduce home heating costs.
- Reduce the risks of harmful health effects from fine particle pollution, especially for young children, people over 65, outdoor workers, and people with asthma or other existing heart or lung diseases.
- Prevent costly interventions, stricter controls, and increased federal oversight by reducing the risk of nonattainment (or not meeting) health-based air quality standards.

Ecology anticipates that this action could result in economic impacts if the supply or availability of wood stoves meeting state certification requirements is limited or if the wood stoves meeting the requirements are more costly.

We received the following feedback on this proposal:

- Ecology should consider providing financial assistance or incentives to families using pellet fuel.
- Ecology should provide information on permitting and installation requirements for different regions of the state.

- Ecology should evaluate the impacts on air quality and make sure that pollution sources are being addressed by local governments and local air agencies.
- Ecology should continue to collaborate with Tribes to provide information on clean-burning stoves and continue to invest in changeout programs and efforts to prevent nonattainment.

Ecology considered options to mitigate potential impacts of this proposal and modified the proposed legislation based on input received during the comment period, feedback from stakeholders, and continuous analysis and information gathering to:

- Continue to seek funding for our wood stove changeout and recycling grants.
- Continue to monitor impacts to air quality.
- Collaborate with Tribes to reduce smoke and prevent nonattainment.
- Incorporate additional resources for compliance assistance, to provide information on existing programs that offer energy assistance, and direct people to information on permitting and installation requirements.
- Add authority for Ecology to adopt by rule a sell-through provision allowing retailers additional time to sell EPA-certified devices in their inventory that do not comply with Washington's certification requirements.

If the agency request legislation is adopted by the Legislature and signed by the Governor, Ecology would conduct additional outreach in the rulemaking process and associated environmental justice assessment and conduct an economic analysis on the proposal. This would provide further opportunities for input and analysis on additional mitigation opportunities.

Environmental Justice Assessment

Purpose of the Environmental Justice Assessment

The Environmental Justice (EJ) Assessment process helps assess the environmental justice impacts of Significant Agency Actions (SAAs). The assessment informs and supports consideration of overburdened communities and vulnerable populations when making decisions. This information assists with the equitable distribution of environmental benefits, the reduction of environmental harms, and the identification and reduction of health disparities.

The EJ assessment process aligns with Washington's Environmental Justice law called the Healthy Environment for All (HEAL) Act ([RCW 70A.02](https://leg.wa.gov/RCW/default.aspx?cite=70A.02)³), as well as federal commitments in the [Performance Partnership Agreement](#)⁴ with the EPA. The assessment process draws on best

³ <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.02&full=true>

⁴ <https://ecology.wa.gov/About-us/Accountability-transparency/Government-coordination/Partnering-with-the-EPA>

practices established in [Technical Guidance for Assessing Environmental Justice in Regulatory Analysis](#)⁵ and [Promising Practices for EJ Methodologies in NEPA Reviews](#)⁶.

Environmental justice assessments are to be completed for the following actions:

- The development and adoption of significant legislative rules as defined in RCW.05.328⁷.
- The development and adoption of any new grant or loan program that a covered agency is explicitly authorized or required by statute to carry out.
- A capital project, grant, or loan award of at least \$12,000,000 or a transportation project, grant, or loan of at least \$15,000,000.
- The submission of agency request legislation to the office of the governor or the office of financial management for approval.
- (Covered actions are expected to expand in 2025.)

This assessment is not required to be a comprehensive nor an exhaustive examination of all potential impacts of a significant agency action and does not require novel quantitative or economic analysis of the proposed significant agency action.

The time and resource investment, and depth of assessment, will be influenced by the reasonable applicability of the questions to the agency action.

Ecology plans to update this document and incorporate what we learn through practice, community engagement, Tribal consultation, and any guidance we may receive from the Environmental Justice Council.

This Environmental Justice Assessment is adapted for publication and does not include internal agency process instructions.

⁵ <https://www.epa.gov/environmentaljustice/technical-guidance-assessing-environmental-justice-regulatory-analysis>

⁶ https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf

⁷ <http://app.leg.wa.gov/RCW/default.aspx?cite=34.05.328>

Section 1: Background

1. Descriptive title of project/action:

Wood stove standards

2. Date EJ Assessment initiated:

August 9, 2024

3. Ecology Program/Office:

Air Quality Program

4. Point of contact for EJ Assessment:

Joanna Ekrem, Joanna.ekrem@ecy.wa.gov, (360) 704-0514 and Whitney Oswald, Whitney.Oswald@ecy.wa.gov, (564) 669-4423

5. Significant Agency Action type, select one or more:

- Rulemaking
- New grant or loan program
- New capital project, grant, or loan of \$12 million or more
- Request legislation
- Other, explain:

6. Write a short summary of the action.

Once a leading national example for a state wood stove policy, Washington’s residential wood heating laws have become outdated and emission standards for new wood burning devices, such as wood stoves, pellet stoves, masonry heaters, hydronic heaters, and forced air furnaces, have been surpassed by federal regulations. However, according to a [recent evaluation by the EPA Office of Inspector General](#), “the EPA’s Residential wood heater program does not provide reasonable assurance that heaters are properly tested and certified before reaching consumers.” Ecology is proposing legislation that would allow the agency to verify and certify the tests already submitted by wood stove manufacturers to EPA to ensure that wood stoves sold and installed in Washington burn clean and truly meet national standards. The proposed legislation would also direct us to keep Washington’s standards aligned with the latest national standards.

This agency request legislation is not anticipated to have any likely or probable environmental harms or negative health impacts to overburdened communities and vulnerable populations. This request is designed to support and result in statewide benefits to environmental and human health. Wood heating is prevalent in both urban and rural communities and in low-income households across the state. Wood smoke from residential wood heating (RWH) contains significant amounts of harmful air pollution including fine particles known as PM2.5, as well as several toxic air pollutants including benzene, formaldehyde, acetaldehyde, acrolein,

and polycyclic aromatic hydrocarbons (PAHs). Wood smoke penetrates deep into the lungs resulting in short and long-term health effects such as asthma, emphysema, bronchitis, cancer, and premature death. While wood smoke can affect everyone, sensitive populations can be at even greater risk. This includes socially and economically disadvantaged people, especially people of color, children, people over 65, people with lung disease, people with heart disease, and outdoor workers.

7. Identify the method(s) for the public to comment on this proposed action for this assessment.

Ecology plans to conduct public engagement in August and early September of 2024, with outreach focused on people from overburdened communities, vulnerable populations, and Tribes for the purpose of developing this Environmental Justice Assessment. Ecology will provide a variety of ways for the public to provide input to inform this Environmental Justice Assessment including: online public meetings, individual and small group meetings with interested parties, and online public comments. We will also reach out to groups with an environmental and environmental justice focus, and community-based groups by email and phone to see if they would like to provide input for this assessment. We will also provide a summary of the proposal to Tribes and provide an opportunity for government-to-government consultation. As we schedule opportunities for public feedback and participation, we will share them through our website.

8. Create/provide an Ecology webpage with information about this proposed action.

Provide link here:

<https://ecology.wa.gov/about-us/budget-legislative-priorities/2025-legislative-priorities>

Section 2: Notification that an Environmental Justice Assessment has been Initiated

This section instructs Ecology staff to notify OFM about the initiation of the action.

Section 3: Identify Affected Tribes

This section summarizes preliminary planning for Tribal Consultation. Ecology must offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

Preparing for Tribal Consultation

1. Is the proposed action likely to have any local or regional impacts to federally reserved Tribal rights and resources, including but not limited to, those protected by treaty, executive order, or federal law? Choose one of the following:

Yes

No

Unsure

2. List any federally recognized Tribes that are expected to be affected by the proposed action. If it is determined during consultation that Tribes do not wish to be included, then do not include them.

Ecology has not identified and does not anticipate any potential significant impacts to Indian Tribes' rights and interest in their tribal lands, as well as traditional practices. However, we determined that the proposal could benefit air quality for Tribes in Washington State, and particularly for areas most at risk of nonattainment for fine particle pollution (PM2.5), including the Confederated Tribes of the Colville Reservation and the Yakama Nation.

3. If it is determined at any other point in the process of the assessment that Tribes have self-identified as being potentially impacted by the action, then include them in the assessment and offer consultation.

Staff from the Colville Tribes reached out for a meeting on this proposal.

4. Describe plans to offer consultation to identified Tribes.

Ecology extended an invitation for government-to-government consultation to federally recognized tribes with lands and territories existent within Washington State borders. Ecology met with the Colville Tribe representatives on the Okanagon River Air Partnership regarding this proposal.

Section 4: Offer Consultation:

This section directs Ecology staff to offer consultation with Tribes on significant agency actions that affect federally recognized Tribes' rights and interest in their tribal lands.

Section 5: Summary of Tribal Consultation & Engagement

Tribal consultation is intended to inform the answers to all questions in this section.

Summary of Tribal Consultation

1. Describe potential impacts (including harms and benefits) to federally recognized Tribal rights and interests in their tribal lands.

Ecology heard concerns from staff from the Colville Tribes that wood stoves purchased and installed through their changeout program may not be clean burning and may not meet

emission standards. As a result, their efforts and partnership with the Okanagon River Air Partnership may not be as effective as anticipated in addressing wood smoke in the region and preventing nonattainment. This proposal would benefit the Tribe by making sure that older wood stoves being replaced are clean burning and have reduced harmful health effects.

Ecology has not identified and does not anticipate any potential significant impacts to Indian Tribes' rights and interest in their tribal lands as well as traditional practices. We are not aware of tribal corporations that manufacture or sell solid fuel burning devices that would be affected by this proposal. However, wood stoves are commonly used among Washington's Tribes and several Tribes are located near areas at risk of PM2.5 nonattainment and are affected by air quality concerns. Enacting more consistent residential wood heating regulations and ensuring new devices are meeting the required standards would benefit the Tribal members that utilize wood heating and the communities affected by those emissions. This is especially true for the Colville Tribes in the Omak area. Currently, the Omak area is exceeding the health-based National Ambient Air Quality Standard (NAAQS) for annual fine particle pollution (PM2.5) and is at risk of nonattainment. The Yakama Nation is also located in or near an area at risk of nonattainment.

2. Describe potential impacts related to Tribal rights and interests that are not in Tribal lands?

We are not aware of potential impacts to Tribal rights and interests that are not in Tribal lands. Tribes may have interests in reducing air quality impacts for community health reasons.

3. Summarize recommendations from Tribes to:
 - a. Mitigate or eliminate potential harms from the action

The Colville Tribes requested that we provide existing information on clean-burning stoves and continue to work collaboratively with the Tribe to improve air quality and reduce wood smoke in the region.

- b. Equitably distribute benefits from the action

Not applicable.

4. Describe how consultation, engagement, and analyses of impacts to Tribes has informed the development of the action. If it has not, explain why.

Ecology extended an invitation for government-to-government consultation to federally recognized tribes with lands and territories existent within Washington state borders on August 14, 2024. Ecology also reached out to and met with the Colville Tribes who we have been working on air quality issues with through the Okanagon River Air Partnership.

5. Describe any plans to continue consultation or engagement with Tribes related to this action.

As of August 29, 2024, we have not received requests for government-to-government consultation; however, we will continue to engage and set up consultations if requested. We met with staff from the Colville Tribes.

Section 6: Identification of Overburdened Communities & Vulnerable Populations

This section identifies overburdened communities and vulnerable populations, as identified in the [definitions of RCW 70A.02](#), who will be affected by the action.

Identify Overburdened Communities and Vulnerable Populations

1. Identify the geographic area(s) anticipated to be affected by the action.

Wood heating in Washington is common across the state and impacts fine particle air pollution levels. As a result, the wood stove standards agency request legislation will likely have impacts statewide. This request legislation strengthens Ecology's residential wood heating program with a goal of reducing fine particle emissions and therefore will not increase air pollution or environmental harms in Washington. Further, the proposal is not likely to negatively impact overburdened communities and vulnerable populations but should reduce the negative impact of particle emissions in those communities. This is especially true in rural areas, where people are more likely to rely on wood stoves and more limited wood stove local retail options. The map included below (Figure 1) shows the distribution of annual (2020) residential wood combustion (RWC) fine particle emissions (PM_{2.5}) in Washington and all of Washington's census tracts. Every census tract in the state includes at least some level of particle emissions from residential wood combustion.

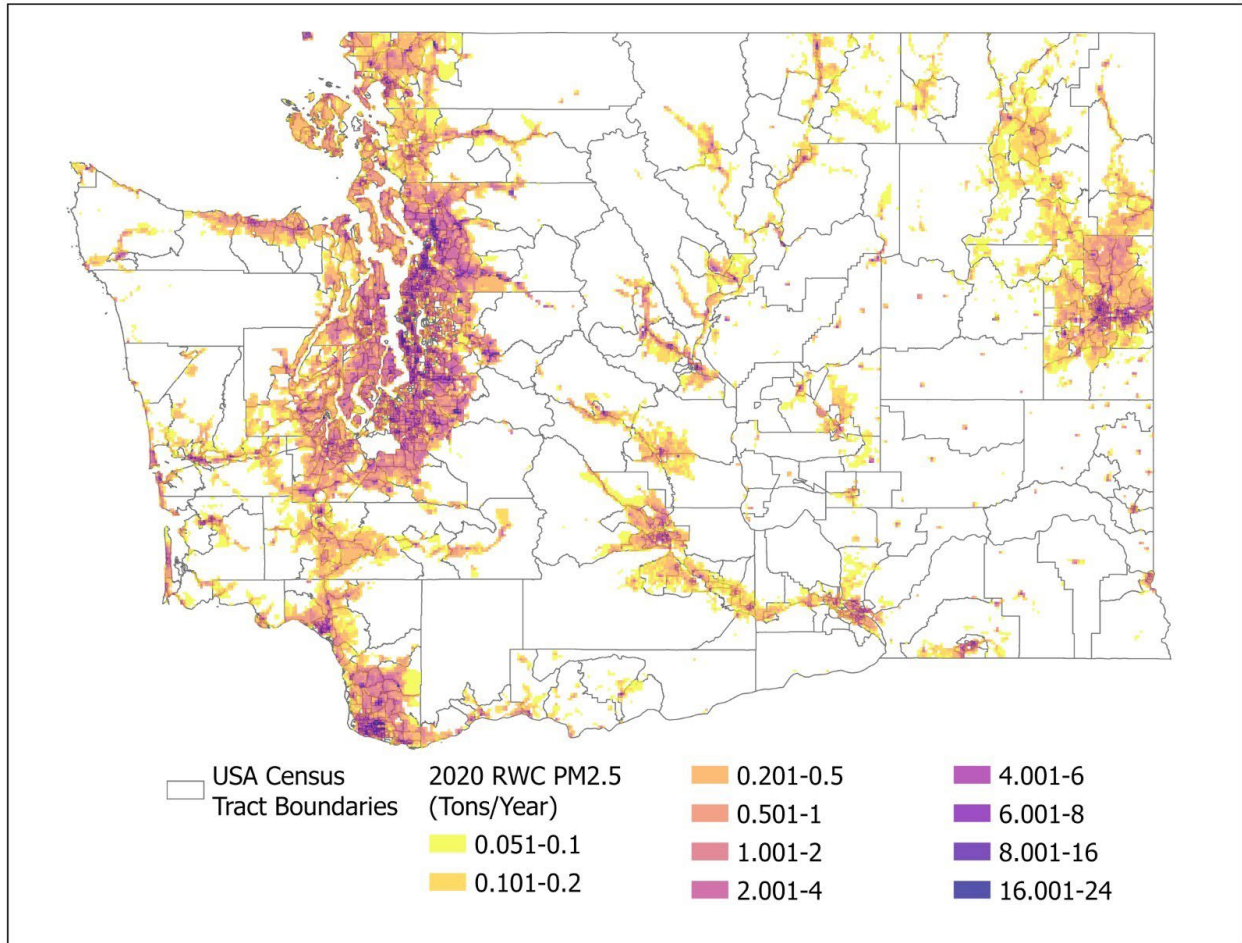


Figure 1. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in relation to Washington census tracts.

- When applicable, using the [Washington State Department of Health’s Environmental Health Disparities Map \(EHD Map\)](#), identify the EHD Map rankings for all census tracts likely to be impacted by the action.

As shown in Figure 1, all census tracts in the state contain some amount of residential wood heating emissions and will thus be impacted by this request legislation.

- From the rankings identified in question 2, are there any census tracts ranked 9 and 10?

Yes

No

If yes, describe.

As shown in Figure 1, all census tracts in the state contain some amount of residential wood heating emissions. This includes all census tracts ranked 9 and 10 on the EHD Map as well. Figure 2 shows annual residential wood smoke in Washington along with the boundaries of overburdened communities with Environmental Health Disparity rankings of 9 and 10. The

census tracts ranked 9 and 10 are exposed to 13.6% (2,367 tons/year out of 17,438 tons/year statewide) of the total annual residential wood combustion particle emissions. While there are higher cumulative emissions in some urban areas, people in rural areas are more likely to rely on wood stoves for heating and have fewer alternatives available for home heating. In addition, people in rural areas may have fewer local wood stove retail options and could be impacted by limits in the supply or changes in prices.

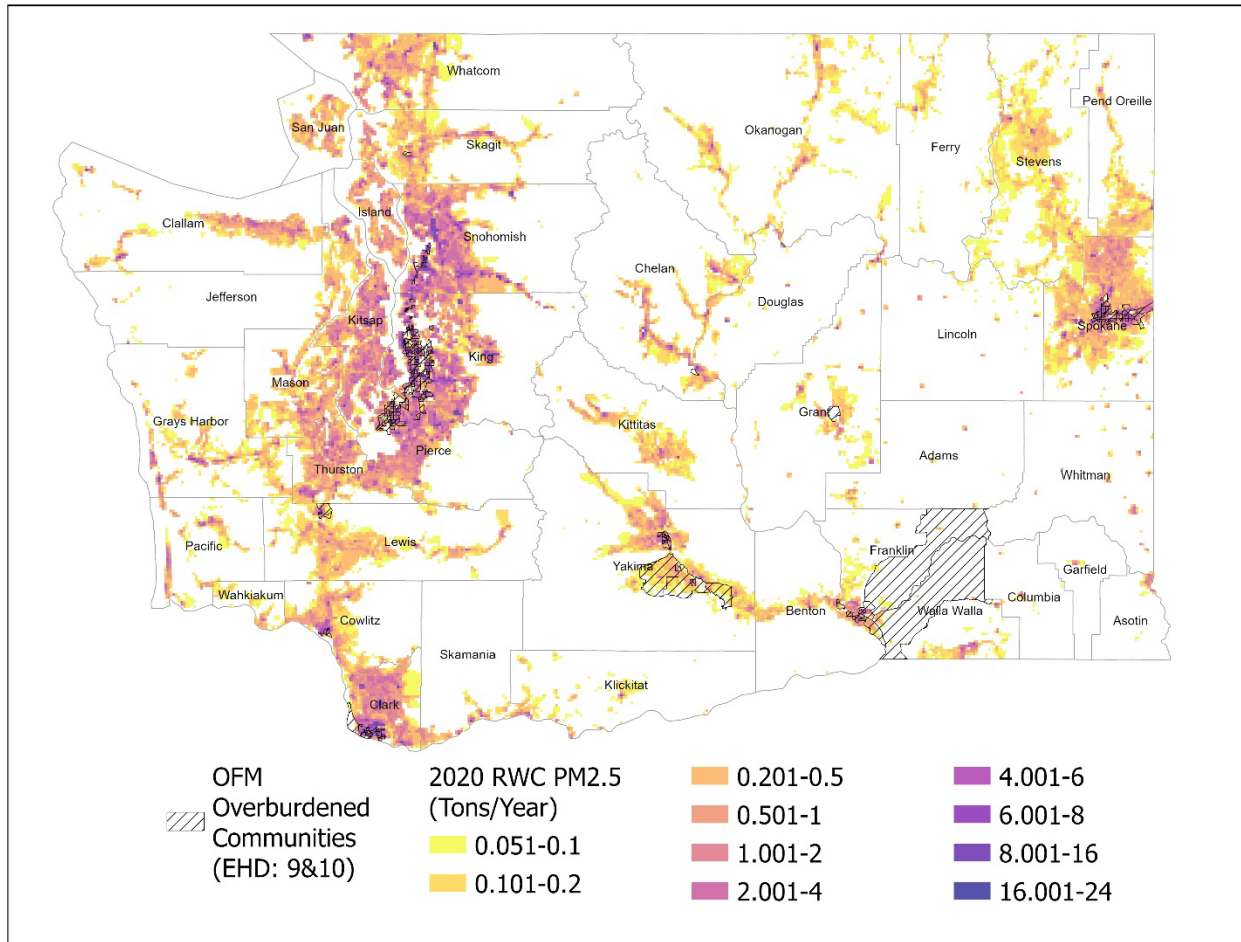


Figure 2. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in overburdened communities with Environmental Health Disparity (EHD) ranking of 9 & 10 as identified by Washington Office of Financial Management.

4. Please describe additional cumulative health considerations relevant to this action.

Wood smoke from residential wood heating contains significant amounts of harmful air pollution including fine particles, as well as several toxic air pollutants including benzene, formaldehyde, acetaldehyde, acrolein, and polycyclic aromatic hydrocarbons (PAHs). Wood smoke penetrates deep into the lungs, resulting in long-term health effects such as emphysema, bronchitis, cancer, and premature death. While wood smoke can affect everyone, the most vulnerable populations are at greater risk. This includes children, teenagers, older

adults, people with lung disease, people with heart disease, outdoor workers, and socially and economically disadvantaged people. This request will benefit people living in areas affected by wood smoke from residential wood heating. It will also benefit people that use residential wood heating for home heating, as it will reduce air pollution inside and outside of the home. It will also benefit people living in communities at risk of nonattainment (or not meeting air quality standards), including people living in Clarkston, Colville, Darrington, Marysville, Omak, Sunnyside, Tacoma, Toppenish, Vancouver, and Yakima. This benefit will increase over time as people replace higher-polluting wood stoves with cleaner burning options, which will reduce exposure to fine particles and improve compliance with health-based fine particle National Ambient Air Quality Standard. Wood stoves are typically long-lasting investments so we expect benefits to increase over decades as more devices are replaced.

5. When applicable, using the [EPA’s Environmental Justice Screening and Mapping Tool \(EJScreen\)](#), identify areas likely to be impacted by the action that are at or above the 80th percentile¹ (in state) for the “People of color” and “Low income” socioeconomic indicators.

This request legislation will have statewide impacts including on those communities at or above the 80th percentile (in state) for the “people of color” and “low income” socioeconomic indicators.

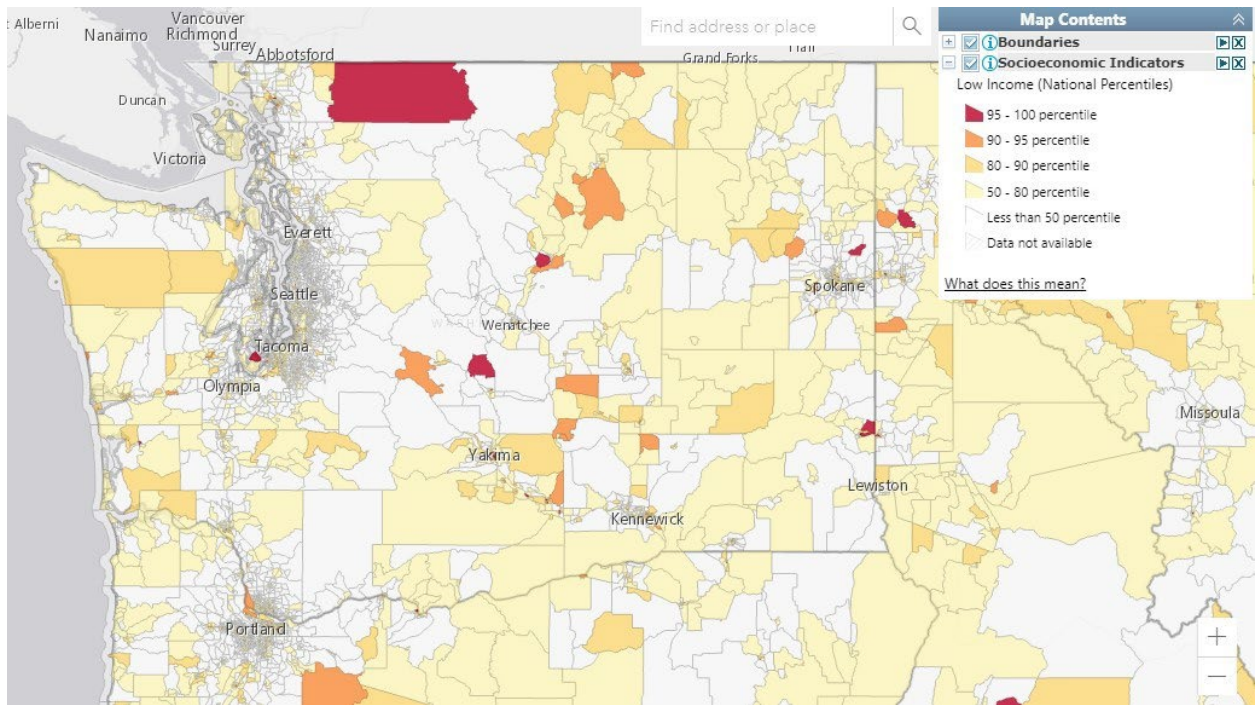


Figure 3. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the “Low income” socioeconomic indicator.

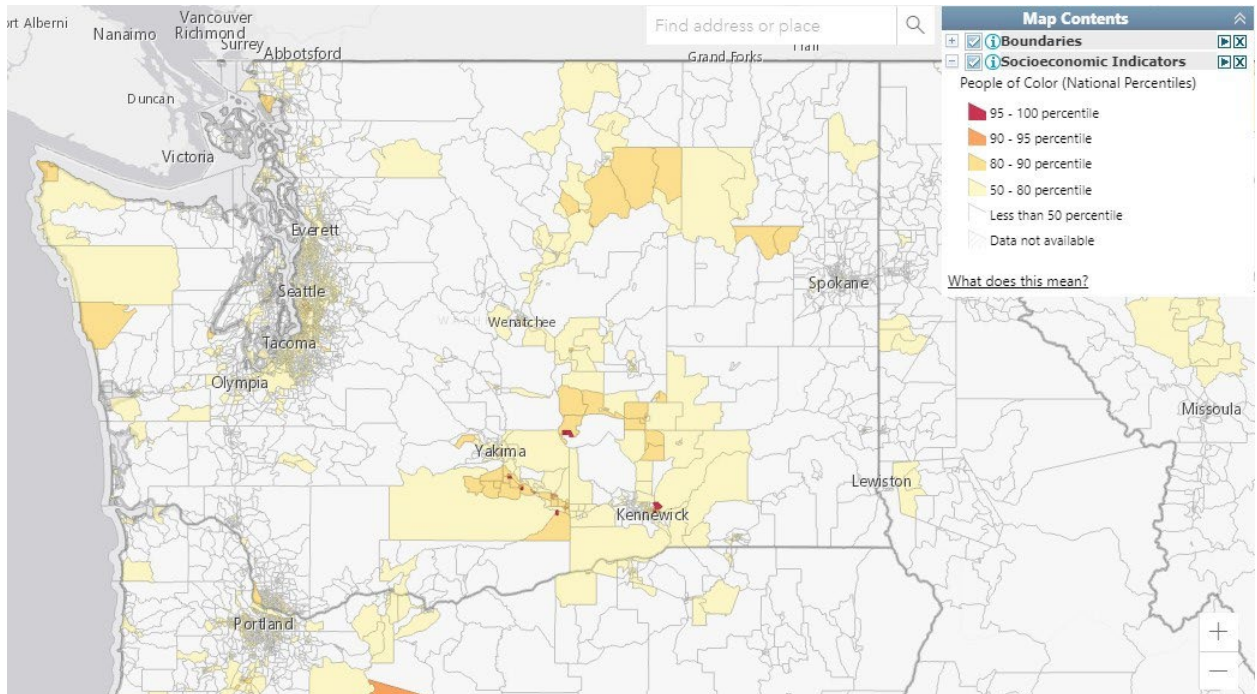


Figure 4. EPA’s EJScreen map showing areas in Washington with communities at or above the 80th percentile for the “People of color” socioeconomic indicators

6. Identify other EJScreen “Socioeconomic” and “Health Disparities” indicators at or above 80th percentile (in state) that are most relevant to this action.

This request legislation will have statewide impacts on communities with “Socioeconomic” and “Health Disparities” indicators at or above 80th percentile.

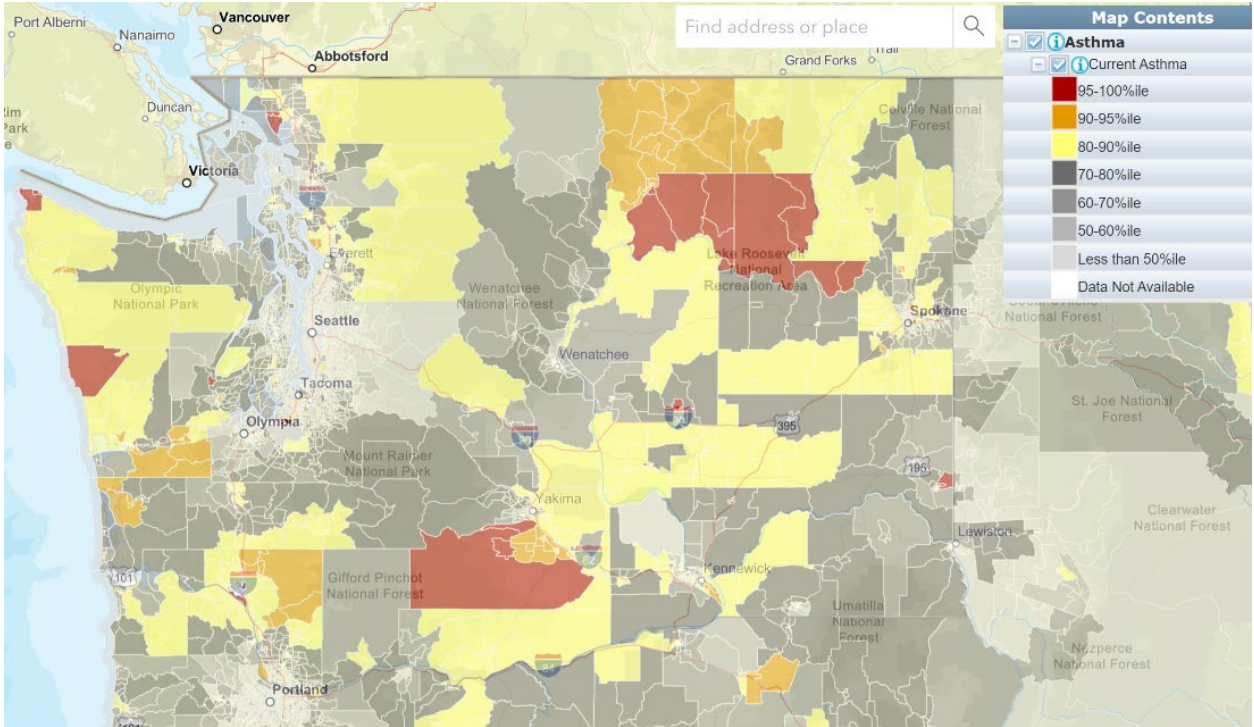


Figure 5. EPA's EJScreen map showing areas in Washington with communities at or above the 80th percentile for the health disparity asthma.

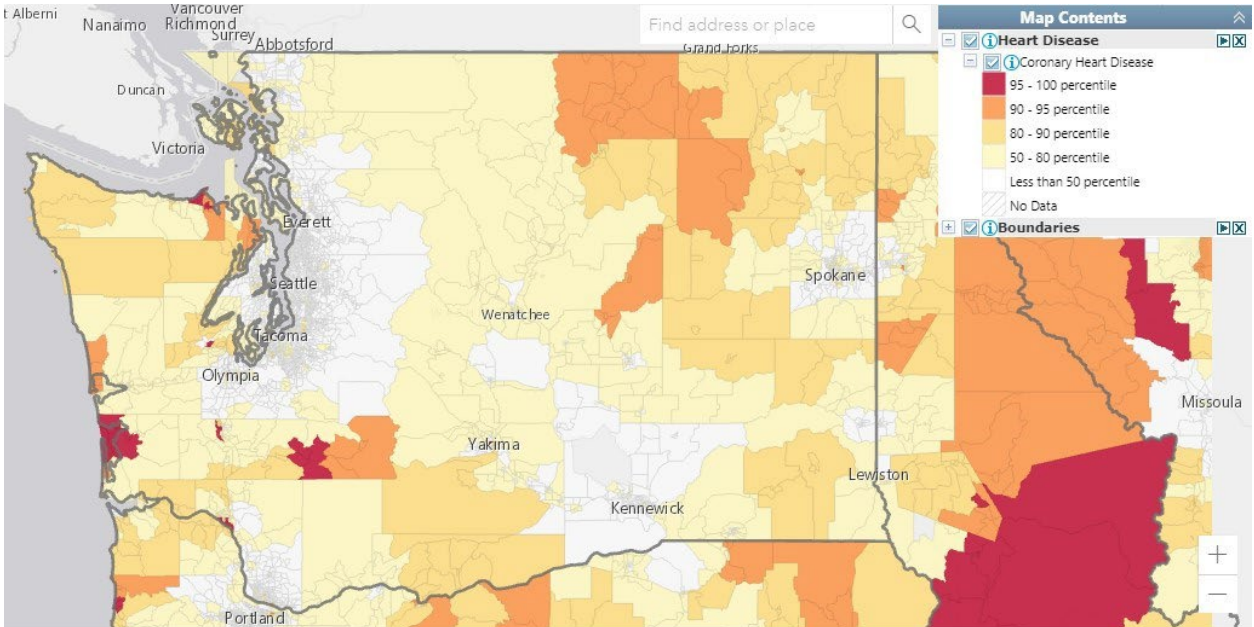


Figure 6. EPA's EJScreen map showing areas in Washington with communities at or above the 80th percentile for the health disparity heart disease.

7. Using EJScreen, identify additional anticipated impacts from climate change in the impacted area, if relevant.

Climate change is resulting in hotter and drier conditions and is projected to continue to increase the intensity and area affected by wildfires, as well as lengthening the fire season. This

is already impacting communities across Washington State, making it important to reduce other sources of smoke in the airshed to protect people's health.

8. Using the federal [Climate and Economic Justice Screening Tool \(CEJST\)](#)³, identify if the potentially affected area is considered disadvantaged for climate risks for additional indicators (as relevant).

Not applicable.

9. Identify additional overburdened communities and vulnerable populations that are likely to be affected by the action.

This request legislation is likely to impact communities where residential wood heating is used most often and where most of the particle emissions from RWH are located. The map included above (Figure 1) shows which areas in the state are most impacted by particle emissions from residential wood combustion. Further, the following additional communities and vulnerable populations are more likely to be generally affected by the request legislation:

- Populations who use residential wood burning as a primary heat source.
- Populations who use residential wood burning as a secondary heat source or for aesthetic reasons.
- Populations of children, teenagers, and older adults.
- Populations of outdoor workers, especially those who work outside during winter months or during air stagnation events.
- Populations of socially and economically disadvantaged people.
- Populations with respiratory problems and diseases.
- Populations who recreate outdoors during winter months or during air stagnation events.
- Rural populations who are more likely to use wood stoves.
- People living in rural areas with limited wood stove retail options could potentially experience higher prices or more limited options if the devices for sale do not meet emission standards.

Additionally, Ecology has identified and prioritized 16 areas in Washington that are overburdened and highly impacted by cumulative criteria air pollution, including from wood smoke from residential home heating and other sources of air pollution. The map below (Figure 7) shows the level of exposure of these communities to fine particle emissions from residential wood combustion.

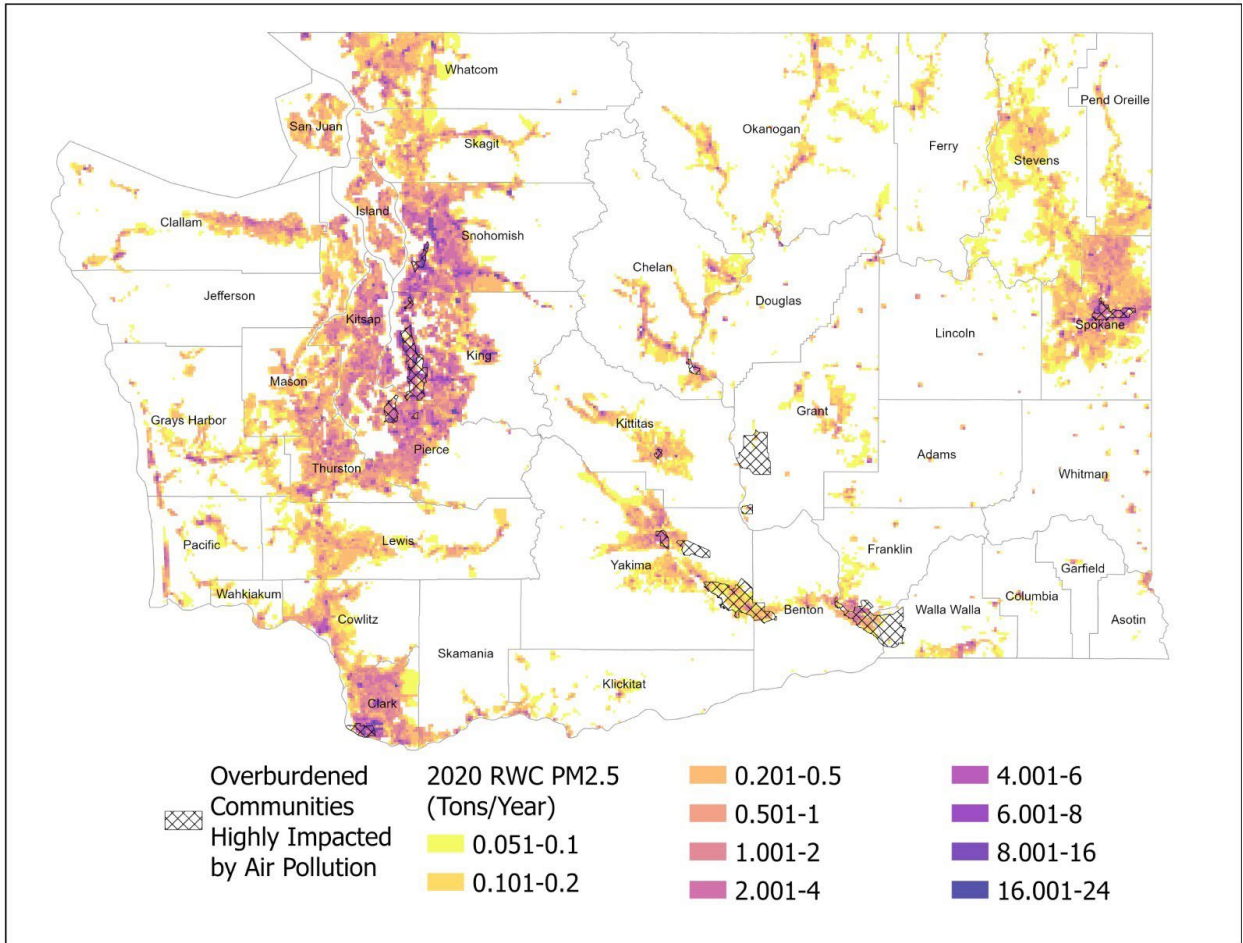


Figure 7. Annual (2020) residential wood combustion (RWC) fine particle emissions (PM2.5) across Washington, and in relation to the 16 Ecology identified overburdened communities highly impacted by air pollution.

10. Through community engagement, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action? Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

No additional communities and vulnerable populations were identified.

11. Through Tribal Consultation, were additional overburdened communities and vulnerable populations identified who are likely to be affected by the action? Describe additional communities or populations identified, and the reasons they would be considered overburdened and vulnerable.

No additional overburdened communities and vulnerable populations were identified.

Section 7: Summary of Community Engagement

This section summarizes community engagement activities. Community Engagement should be tailored to specifically reach overburdened communities and vulnerable populations. Community engagement is required for all significant agency actions, but the engagement methods will vary depending on the size, scope, and topic of the project. The level, type, and form of engagement is based on the likelihood that the actions may cause environmental harm or may affect the equitable distribution of environmental benefits to an overburdened community or a vulnerable population.

Summarizing Community Engagement

1. Describe the engagement activities with identified overburdened communities and vulnerable populations.

Ecology held meetings with several organizations representing overburdened communities to get their initial input on a proposal and budget request for this agency request legislation in May and June of 2024. These organizations included Front and Centered and Duwamish River Community Coalition as well as statewide environmental organizations. In August of 2024, Ecology reached out to over 25 organizations across Washington State representing overburdened communities and vulnerable populations to provide information on this proposal and offer the opportunity to meet to discuss the proposal. We hosted a public listening session on August 26, 2024, and offered a web link for people to provide written comments on the proposal.

2. What actions were taken to help address barriers to meaningful engagement?

Meetings were virtual and Ecology provided information about how to request an accessibility accommodation. Ecology received a question on what translation services were available at the listening session zoom meeting and will follow up to offer to provide translated materials to the organization.

3. Identify overburdened communities or vulnerable populations potentially affected by the action who were not engaged and explain why not.

We primarily reached out to organizations representing overburdened communities and vulnerable populations. This included individuals that represent or are residents of overburdened communities and vulnerable populations. We did not specifically reach out to vulnerable people seeking to purchase a new or used wood stove due to time constraints. If the proposed legislation is adopted, Ecology would complete an additional environmental justice assessment on the rulemaking and anticipate conducting additional outreach at that time. In general, we anticipate the proposal would benefit people purchasing new or used wood stoves in an overburdened community or who are from a vulnerable population by lowering their exposure to harmful air pollution.

4. Summarize recommendations from members of overburdened communities and vulnerable populations to mitigate or eliminate potential harms from the action and/or equitably distribute benefits from the action.

We received feedback from one organization, one individual, and staff from the Colville Tribes to inform this Environmental Justice Assessment. The comments included recommendations to:

- Provide financial assistance or incentives to families using pellet stoves, as the cost of the pellet fuel is higher than the cost of wood, costly electrical system upgrades may be needed, and because getting service for or operating pellet stoves can be more difficult and costly.
 - Provide information on permitting and installation requirements for each region in the state, as incorrect installation can also result in higher air pollution and safety concerns.
 - Monitor the impacts on air quality and make sure that local governments and local air agencies are communicating risks to the community and identifying and addressing the sources of air pollution.
 - Ecology should continue to collaborate with Tribes to provide information on clean-burning stoves and continue to invest in changeout programs and efforts to prevent nonattainment.
5. Describe any plans for ongoing engagement with overburdened communities and vulnerable populations related to this action.

We anticipate ongoing engagement prior to and during the 2025 legislative session. If the bill passes, the rulemaking process for this action will require an additional environmental justice assessment and an economic analysis.

Section 8: Potential Environmental Benefits & Harms from Action

Identify Potential Environmental Benefits & Harms from Action

1. Describe the anticipated benefits (direct and/or indirect) from this action.

Ecology anticipates that this action will improve people's health by reducing emissions of harmful air pollution from wood stoves including fine particle matter and toxic air pollutants. We anticipate this will help improve outdoor air quality in several areas at risk of nonattainment for the health-based air quality standards and will also improve indoor air quality in the homes of people who use wood stoves. We anticipate that the proposal could have economic benefits from reducing home heating costs for people who purchase more efficient new or used wood stoves. However, if there are impacts to the supply of devices meeting the standards, there could be impacts to the prices of the devices. We would conduct a full economic analysis during the rulemaking process.

2. Who will primarily benefit from this action?

People who live in communities impacted by fine particle air pollution from wood stoves will benefit primarily from this action, as will people who purchase more efficient, clean burning new or used wood stoves.

3. How is the action expected to benefit specifically overburdened communities or vulnerable populations? If there is no benefit, identify potential barriers to benefitting from the action.

The action is expected to benefit overburdened communities or vulnerable populations who face higher environmental and health harms from air pollution by reducing their exposure to fine particle air pollution and reducing harmful health impacts. It would also provide confidence to people who purchase new or used wood stoves that their devices are clean burning and could save them money on home heating costs.

4. Describe anticipated harms (direct and/or indirect) from this action.

This agency request legislation is not anticipated to have any likely or probable environmental harms or negative health impacts to overburdened communities and vulnerable populations. Ecology's wood stove grant program provides financial assistance to recycle older, higher-polluting wood stoves. This action could limit the sale of wood stoves that are not properly tested and certified as meeting emission standards. If this action limits the availability or supply of devices to retailers in Washington, it could result in price impacts if the cleaner burning devices meeting the standards are more expensive or if there are limited alternatives that meet the standard. It could impact manufacturers of wood stoves located in Washington State if they are not able to sell certain models in the state that do not meet the standards. We would work proactively with them to provide assistance to resolve these issues and get them back into compliance.

5. Who will primarily experience the harms?

People living in rural areas with limited wood stove retail options could potentially experience higher prices or more limited options if the devices for sale do not meet emission standards.

6. Describe how the action may harm overburdened communities or vulnerable populations? Be as specific as possible.

This agency request legislation is not anticipated to have any likely or probable environmental harms or negative health impacts to overburdened communities and vulnerable populations. This action would help ensure that wood stoves meet emission standards and reduce exposure to harmful fine particle pollution. There could be impacts on availability or prices of devices for certain areas. Ecology would further evaluate with the intent to mitigate the economic impacts through a rulemaking process.

7. Describe how the action would address environmental and health disparities.

This action would not directly address environmental and health disparities, but it would create statewide improvements to environmental and community health by reducing exposure to harmful fine particle air pollution. Since high concentrations of wood smoke overlap with identified overburdened communities, it will result in improved air quality conditions in those areas. It would especially benefit low-income households who more commonly use wood for home heating, as well as young children, people over 65, outdoor workers, and people with asthma or existing heart and lung disease who are especially prone to negative health effects from air pollution exposure.

Section 9: Options to Eliminate, Reduce, or Mitigate Harms and Equitably Distribute Benefits

This section summarizes options identified for eliminating, reducing, or mitigating harms as well as options for equitably distributing anticipated benefits. The answers in this section should be informed by engagement, answers from the previous subsections, and any legislative or regulatory boundaries that limit possible decision making.

Identify Options to Eliminate, Reduce, or Mitigate Harms & Equitably Distribute Benefits

1. Describe options to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations; and options to equitably distribute the benefits.

Ecology considered a number of options to reduce, mitigate, or eliminate potential harms to overburdened communities and vulnerable populations and to equitably distribute the benefits:

- A. Ecology could seek additional funding from the Legislature for our grant program to reduce air pollution from wood stoves. This is a statewide competitive grant program and provides funding from the state Capital Budget to local clean air agencies and Ecology's regional offices to replace or recycle older higher polluting wood stoves. Funding for replacing wood stoves with cleaner burning devices is prioritized for low-income households, people who rely on wood as the primary source of heat, high volume burners, and people living in areas with higher levels of fine particle air pollution. This program could help offset any price impacts resulting from this proposal.
- B. Ecology could evaluate the impacts on air quality and make sure that pollution sources are being addressed by local governments and local air agencies.
- C. Ecology could continue to collaborate with Tribes to provide information on clean-burning stoves and continue to invest in changeout programs and efforts to prevent nonattainment.
- D. Ecology could seek additional resources for compliance assistance to help retailers and manufacturers to meet standards and to help individuals ensure new or used devices they purchase are clean burning.
- E. Ecology could coordinate with Department of Commerce, Department of Health, and the State Building Code Council to provide additional information to people about energy assistance programs, ways to protect their health, and permitting and installation requirements.
- F. Ecology could seek additional funding for education, outreach, and assistance to people who rely on wood for home heating to take steps to operate their stoves more efficiently and use dry seasoned wood.

- G. Ecology could collaborate with partners including the Department of Health, Commerce, the State Building Code Council, and others to provide resources on indoor air quality, energy assistance, weatherization assistance, and permitting and installation requirements to help overburdened communities and vulnerable populations access assistance.
- H. Ecology could consider a sell-through period for manufacturers and/or retailers to sell devices that do not comply with testing requirements.

2. Describe methods chosen for this action to reduce, mitigate, or eliminate the identified probable harms to overburdened communities and vulnerable populations; and methods chosen to equitably distribute the benefits. You must consider the following methods, but are not limited to them:

Ecology will continue to seek resources from the Legislature for our wood stove grant program to address option A above.

Ecology will continue to monitor air quality to address B above and is expanding its monitoring network to additional areas in the state, with an emphasis on overburdened communities highly impacted by air pollution.

Ecology commits to continue implementing option C to collaborate with Tribes to improve air quality, reduce smoke, and prevent nonattainment.

Ecology incorporated additional resources into our budget request for staff to provide compliance assistance to help retailers and manufacturers meet the standards and to help individuals ensure new or used devices they purchase are clean burning. New staff would also coordinate to help people needing assistance to access our grant program for financial assistance in replacing or recycling older, higher polluting devices, and coordinate providing information to help people access assistance from partner agencies. This would provide Ecology increased capacity to address options D, E, F, and G above.

Ecology also addressed option H by adding authority to adopt by rule a sell-through provision allowing retailers additional time to sell EPA-certified devices that are removed from Washington's certification list.

3. If the agency determines it does not have the ability or authority to eliminate, reduce, or mitigate environmental harms caused by the action, or address the equitable distribution of environmental benefits, explain why that determination was made.

Not applicable.

Section 10: Notification of Completed Assessment

This section summarizes processes for staff to take once they have completed their assessment, including steps for sharing the final product. Learn more about all ongoing and completed Environmental Justice Assessments on our [agency webpage](#)⁸.

⁸ <https://ecology.wa.gov/About-us/Who-we-are/Environmental-Justice/HEAL/EJ-Assessments>