



# Landfill Methane Emissions Reduction Grant Program

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

By

Janée Zakoren

For the

**Air Quality Program**

Washington State Department of Ecology  
Olympia, Washington

October 2024, Publication 24-02-044

## Contact Information

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<sup>1</sup> [www.ecology.wa.gov/contact](http://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](mailto: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](mailto:courtney.cecale@ecy.wa.gov) o llamando al (360) 480-6270.

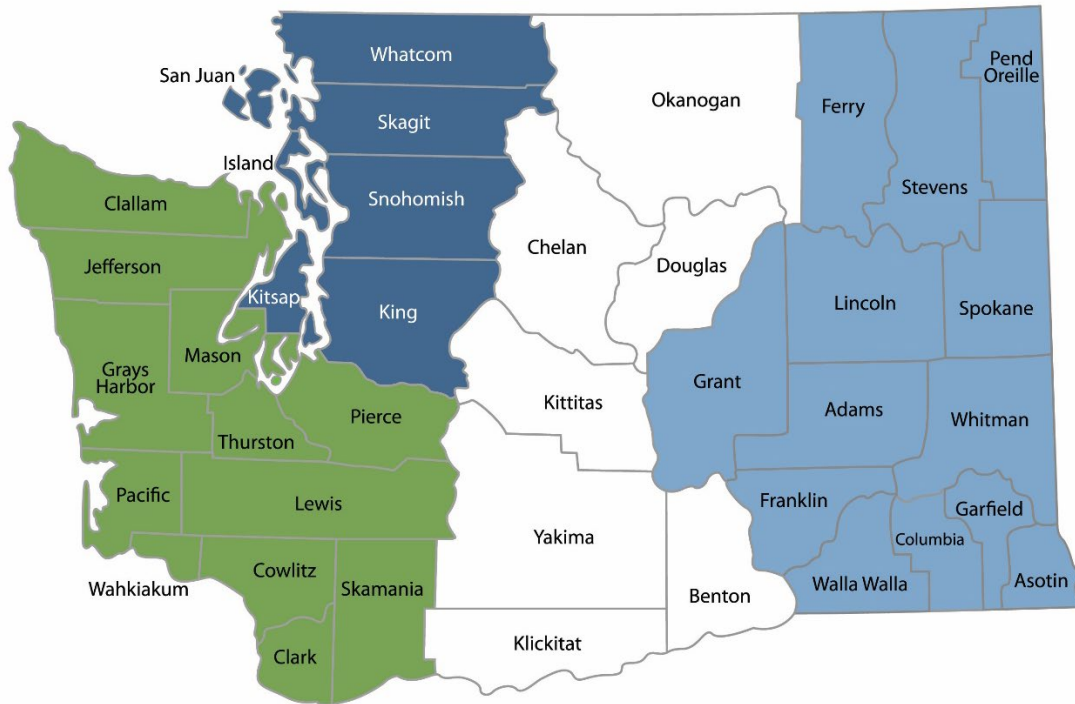
根据华盛顿州环境正义法(RCW 70A.02), 生态管理署在制定某些重大行动时必须进行环境正义评估。该评估需提供对负担过重社区和弱势群体潜在影响的信息, 以及减轻已明确危害和公平分配已知利益的策略。如需笔译、口译或无障碍协助, 请联系 Courtney Cecale, 电子邮件: [courtney.cecale@ecy.wa.gov](mailto:courtney.cecale@ecy.wa.gov)或电话 (360) 480-6270。

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](mailto: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](mailto:courtney.cecale@ecy.wa.gov) 또는 전화 (360) 480-6270으로 문의하십시오.

# Department of Ecology's Regional Offices

## Map of Counties Served



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

# Landfill Methane Emissions Reduction Grant Program

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**An Environmental Justice Assessment (per RCW 70A.02.060)<sup>2</sup>**

Air Quality Program  
Washington State Department of Ecology  
Olympia, WA

**October 2024 | Publication 24-02-044**



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

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

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## Executive Summary

In 2023, the State Legislature appropriated \$9.6 million from Climate Commitment Act (CCA) funds to help municipal solid waste (MSW) landfill owners and operators comply with standards in a new [Landfills Methane Emissions law \(Chapter 70A.540 RCW\)](#) and subsequent rule. Ecology will distribute these funds to help landfill owners and operators with costs for design, planning, installing or upgrading gas collection and control systems, increasing surface emissions monitoring, as well as other requirements.

As Ecology developed the new [Landfill Emissions Reduction Grant Program](#), we sought input to ensure the program aligns with equity principles, the needs of potential applicants, and the goals of the program. To this end, we conducted a digital survey of MSW landfills in Washington, met with industry associations, and hosted a listening session with Tribes in May and a virtual public engagement workshop in June 2024, alongside a 30-day online written [comment period](#).

We sought and received input on eligible expenses, scoring and evaluation, technical support, impacts to the community, mitigating and/or eliminating potential harm, and equitable distribution of benefits.

One possible harm from this grant program is the timeline of the grant. Some MSW landfills are still trying to understand what the requirements of the Landfill Methane Emission law (Chapter 70A.540 RCW) means for them and what projects need to be completed to meet compliance requirements. For this reason, they are not able to ask for funding to support projects that have yet to be determined.

Additionally, some of the projects that landfills need to meet compliance with the rule can take a long time to execute. The current grant period ends June 30, 2025. Ecology expects to extend the project period for up to two years, dependent upon approval to extend the time to spend the funds, but we cannot guarantee this extension for grantees at this time. This may be a barrier to applications or to successful applicants' project implementation.

To reduce mitigate, or eliminate the identified possible harms identified, Ecology will:

- Clearly communicate with applicants the timeline of funding so applicants can plan accordingly.
- Allow for grant projects which support MSW landfill owners in understanding compliance
- Allow for grants funds to be combined with other funding sources to leverage the dollars and create seamless integration into existing programs, while still ensuring the scope of work and distinct use of grant funds is clear.



# 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<sup>3</sup>](#)), as well as federal commitments in the [Performance Partnership Agreement<sup>4</sup>](#) with the EPA. The assessment process draws on best practices established in [Technical Guidance for Assessing Environmental Justice in Regulatory Analysis<sup>5</sup>](#) and [Promising Practices for EJ Methodologies in NEPA Reviews<sup>6</sup>](#).

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

- The development and adoption of significant legislative rules as defined in RCW.05.328<sup>7</sup>
- 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 or 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.

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

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

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

<sup>6</sup> [https://www.epa.gov/sites/default/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf)

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

## Section 1: Background

The information in this section is provided for the Office of Financial Management's [dashboard](#)<sup>8</sup> which includes all covered agency's Environmental Justice Assessment notices.

### Background Information

1. Descriptive title of project/action:

Landfill Methane Emission Reduction Grant

2. Date EJ Assessment initiated:

February 5, 2024

3. Ecology Program/Office:

Air Quality

4. Point of contact for EJ Assessment:

Janée Zakoren

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.

Owners and operators of Municipal Solid Waste (MSW) Landfills in Washington must meet new requirements (RCW 70A.540) to reduce emissions of methane gas, a potent greenhouse gas emitted by landfills. Under the new law, MSW landfill owners and operators may be required to improve technology and performance of current systems in place, such as installing gas collection and control equipment or upgrading current equipment, increase monitoring requirements as well as record keeping and reporting. The 2023-25 Washington

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<sup>8</sup> <https://ofm.wa.gov/budget/budget-related-information/agency-activities/environmental-justice-assessment-notices>

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State Budget includes \$9.6 million to establish a grant program and help offset the cost for landfill owners and operators to meet the new requirements.

Landfills are a significant source of methane emissions in Washington. Ecology’s most recent Greenhouse Gas inventory reported approximately 2.4 million tons of carbon dioxide equivalent emissions from waste management, which was approximately 2.4% of the state’s total GHG emissions in 2019.

Additionally, methane has underlying cardiovascular, respiratory, and neurological implications. Communities adjacent to MSW landfills, especially those considered overburdened, may be concerned about the potential public health and additional downstream effects of uncontrolled methane emissions. While communities are not eligible entities, they may still inform the development of this and other, interconnected grant programs.

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

Beginning in 2024, Ecology will conduct community engagement with overburdened communities on related air quality programs and funding opportunities. We are hoping to reduce redundancy for communities by trying to collaborate across teams for shared engagement activities for grants of similar kinds in the same program. Although specific events are yet to be planned, we are hoping to hear from communities through interviews, questionnaires, and community meetings to inform this grant program.

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

Provide link here: <https://ecology.wa.gov/LFmethane>

## 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.

All Tribes with land, territories, and usual and accustomed land in Washington who own and/or operate a MSW landfill on those lands are potentially affected by the proposed action. Although landfills located on Tribal reservation or trust lands are not subject to the Landfill Methane Emissions law (Chapter 70A.540 RCW) and rule (173-408 WAC), Tribes that opt to meet all the requirements of the law and rule are eligible for funds to assist with the purchase of landfill gas collection and control components.

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.

We have not had any Tribes self-identify as being potentially impacted by the Landfill Methane Emission Reduction Grant program.

4. Describe plans to offer consultation to identified Tribes.

On May 9th, 2024, Ecology sent a letter to all chairpersons and natural resources directors of federally recognized Tribes with land, territories, and usual and accustomed land in Washington. This letter extended an invitation for government-to-government consultation about two new grant programs: The Landfill Methane Emissions Reduction Grant Program and the Improving Air Quality in Overburdened Communities Grant Program. Ecology requested input on the development of the grant programs and offered a joint Tribal-only listening session for both programs on Wednesday, May 29th from 2 – 4 p.m., as well an invitation to meet and consult on any issues of concern related to the grant programs.

## **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.

- Do not share sensitive data or location information attributable to individual sites.
- Do not share any information that Tribes have requested that you not share.

Our listening session with Tribes included attendees from Colville Reservation, Cowlitz Indian Tribe, Lummi Nation, Nez Perce Tribe, Nooksack Indian Tribe, Puyallup Tribe, Shoalwater Bay Indian Tribe, and the Spokane Tribe of Indians. During our listening session we discussed the grant program, and we received one question asking if Tribes could partner with landfills. Options for this could be explored with more information.

We did not receive input on the potential impacts to federally recognized Tribal rights and interest in their tribal lands as a result of the grant program.

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

Potential impacts related to Tribal rights and interests that are not on Tribal lands were not identified during the listening session with Tribes.

3. Summarize recommendations from Tribes to:

- a. Mitigate or eliminate potential harms from the action

We received input during our listening session with the Tribes listed above that by providing technical assistance and support for applicants through the grant application process, Ecology could help mitigate or eliminate potential harms from this grant program.

- b. Equitably distribute benefits from the action

During our listening session with Tribes, we asked how we can equitably distribute the benefits of this grant program but did not receive any input on this topic.

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

Based on the input we received, we have incorporated the following elements into the grant program to address impacts to Tribes:

- Ecology grants staff will reach out directly to all Tribes opting to comply with the landfill methane emissions law and provide technical assistance during the grant application period.
- Ecology grants staff will provide technical assistance and grant management guidance to all grantees, including Tribes, during the grant period.

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

Ecology grants staff will communicate with Tribes to share the grant requirements and timelines, offer technical assistance, and share other resources available during the grant application period as requested and appropriate.

## **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.

This action will provide funding for municipal solid waste (MSW) landfill owners to comply with standards in a new [Landfills Methane Emissions law \(Chapter 70A.540 RCW\)](#) and subsequent rule. We anticipate approximately 26 MSW landfills in 25 different areas may be required to comply and are therefore eligible to apply for the grant program. The landfill locations include:

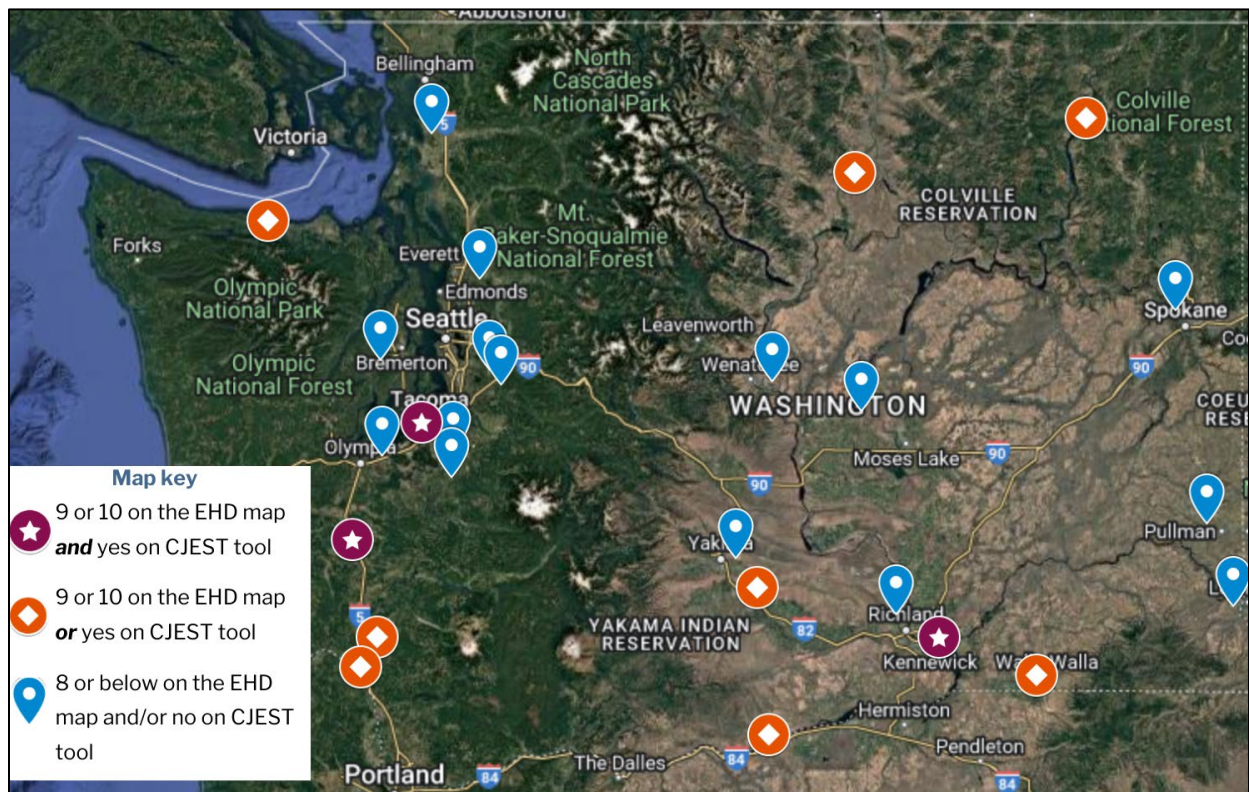
Alphabetical by location:

- Bow
- Bremerton
- Castle Rock
- Cathcart
- Centralia
- Clarkston
- East Wenatchee
- Ephrata
- Graham

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- Kettle Falls
- Lacey
- Longview
- Maple Valley
- Okanogan
- Pasco
- Port Angeles
- Pullman
- Puyallup
- Richland
- Roosevelt
- Spokane
- Tacoma
- Walla Walla
- Yakima
- Zillah

The map below (Fig. 1) provides a visual representation of the landfills in the communities listed above. The burgundy star shaped markers indicate the landfill scores a 9 or 10 on the [Washington State Department of Health’s Environmental Health Disparities Map \(EHD Map\)](#) and is identified as overburdened on the [Climate and Economic Justice Screening Tool \(CEJST\)](#)<sup>9</sup>. The orange diamonds indicate the landfill scores 9 or 10 on the EHD map or is identified as overburdened on the CEJST tool. The blue teardrop markers indicate landfills that score 8 or below on the EHD map and are not identified as overburdened on the CEJST.



**Figure 1.** Map of municipal solid waste landfills that may be required to comply with the Landfill Methane Emission law and are eligible to apply for the LMER grant program.

<sup>9</sup> This is a national tool and may provide relevant information and understanding of the climate related context of the action. Learn more about the methodology for identifying if a community is disadvantaged for climate risks here: [Methodology & data - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](#)

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2. 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.

Ecology used the EHD map and the federal Climate and Economic Justice (CJEST) screening tool to identify the MSW landfills located in areas with higher environmental burden and population vulnerabilities. Eleven MSW landfills exist in areas with rankings of 9 or 10 on the EHD map across all census tracts or have been identified as overburdened and underserved on the CJEST tool. The locations of those MSW landfills include:

- Castle Rock
- Centralia
- Kettle Falls
- Longview
- Okanogan
- Pasco
- Port Angeles
- Roosevelt
- Tacoma
- Walla Walla
- Zillah

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

Yes

No

If yes, describe.

Three MSW landfills exist in communities that include census tracts ranking 9 or 10 on the Environmental Health Disparities map, including:

- Centralia
- Pasco
- Tacoma

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

Beyond emitting methane, landfills can also release harmful co-pollutants which adversely impact the health and well-being of nearby communities. Landfill gas contains hazardous air pollutants (like [vinyl chloride](#)<sup>10</sup>, [benzene](#)<sup>11</sup>, [toluene](#)<sup>12</sup>, [ethyl benzene](#)<sup>13</sup>)<sup>14</sup>, precursors to ozone and particulate matter (PM) (like Volatile Organic Compounds), and odor nuisance

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<sup>10</sup> <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/vinyl-chloride.pdf>

<sup>11</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/benzene.pdf>

<sup>12</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/toluene.pdf>

<sup>13</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/ethylbenzene.pdf>

<sup>14</sup> <https://www.epa.gov/lmop/basic-information-about-landfill-gas>



*Washington State Department of Ecology*  
*Environmental Justice Assessment Template*

compounds (like hydrogen sulfide). These compounds have been found to contribute to urban smog and impact human health and the environment. This grant program will help MSW landfills to curb methane emissions contributing to the climate crisis and better control co-pollutants harming the health and wellbeing of nearby residents.

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 80<sup>th</sup> percentile<sup>15</sup> (in state) for the “People of color” and “Low income” socioeconomic indicators.

This grant program will provide funding opportunities for MSW landfills, prioritizing those landfills located in communities that have been identified as overburdened using the Washington EHD map and the federal CJEST tool. The threshold for identification of communities overburdened was >90th percentile.

One MSW landfill is located in a community that is at or above the 80th percentile for the “People of color” and “Low income” socioeconomic indicators:

- Pasco – 98% people of color & Low income

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

This grant program will provide funding opportunities to MSW landfills located in communities identified as overburdened or vulnerable populations using different tools and data sources, including EPA’s EJScreen. In an effort to identify and prioritize communities that have been historically and continue to be disproportionately exposed to environmental hazards and are also physically, socially and economically vulnerable, we are using all EJScreen indicators as a scoring criterion in the application evaluation process.

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

Using several tools and data sources, including EPA’s EJScreen, this grant program will provide funding opportunities to MSW landfills that are located within communities that have been identified as overburdened and/or having vulnerable populations. Methane emissions produced at such landfill locations will rise and mix into the atmosphere likely resulting in climate impacts in and beyond the immediate overburdened communities. We are prioritizing investments in overburdened communities and vulnerable populations to reduce overall climate-related health inequities and improve economic and health benefits in those and other communities.

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<sup>15</sup> The EPA identified the 80th percentile as an initial starting point and potential indicator of environmental justice considerations. <https://www.epa.gov/ejscreen/frequent-questions-about-ejscreen>

Environmental Justice Assessment Template

8. Using the federal [Climate and Economic Justice Screening Tool \(CEJST\)](#)<sup>16</sup>, identify if the potentially affected area is considered disadvantaged for climate risks for additional indicators (as relevant).

There are 11 MSW landfills that are in communities considered disadvantaged for climate risks according to the CEJST tool. Those communities are:

- Castle Rock
- Centralia
- Cheyne
- Kettle Falls
- Longview
- Okanogan
- Pasco
- Port Angeles
- Roosevelt
- Tacoma
- Walla Walla

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

In addition to methane gas, landfills can also release harmful co-pollutants into the air which adversely impact the health and well-being of nearby communities. Landfill gas contains hazardous air pollutants (e.g. [vinyl chloride](#)<sup>17</sup>, [benzene](#)<sup>18</sup>, [toluene](#)<sup>19</sup>, [ethyl benzene](#)<sup>20</sup>)<sup>21</sup>, precursors to ozone and particulate matter (PM) (e.g., VOCs), and odor nuisance compounds (e.g., hydrogen sulfide). These compounds have been found to contribute to urban smog and impact human health and the environment. Reduction in air pollution will benefit the following sensitive groups and vulnerable populations with increased risk related to poor air quality, including but not limited to:

- People with respiratory or cardiovascular conditions
- Children
- Older adults
- Pregnant people
- People of color

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<sup>16</sup> This is a national tool and may provide relevant information and understanding of the climate related context of the action. Learn more about the methodology for identifying if a community is disadvantaged for climate risks here: [Methodology & data - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](#)

<sup>17</sup> <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/vinyl-chloride.pdf>

<sup>18</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/benzene.pdf>

<sup>19</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/toluene.pdf>

<sup>20</sup> <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.epa.gov/sites/default/files/2016-09/documents/ethylbenzene.pdf>

<sup>21</sup> <https://www.epa.gov/lmop/basic-information-about-landfill-gas>

- Tribal and indigenous people
- People with low income
- Outdoor workers

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.

Community engagement did not result in identifying additional overburdened communities and vulnerable populations who are likely to be affected by this action.

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.

At this time, Tribal consultation has not identified additional overburdened communities and vulnerable populations who are likely to be affected by this action.

## **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.

As Ecology developed the new [Landfill Emissions Reduction Grant Program](#), we sought input to ensure the program aligns with equity principles, the needs of potential applicants, and the goals of the program. To this end, we conducted a digital survey of MSW landfills in Washington, met with industry associations, hosted a listening session with Tribes in May 2024 and a public virtual engagement workshop in June 2024, alongside a 30-day online written comment period.

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We communicated directly to the owners of MSW landfills located in overburdened communities to ensure awareness and opportunity to provide input on the development of the grant program. The [summary of our engagement and response to comments](#) describes the input we received alongside whether, how, and why we incorporated it into the grant program.

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

To comply with Title VI of the Civil Rights Act, all materials and meetings met state and federal accessibility standards and Ecology provided information on how to request language access.

We did not provide stipends or reimbursements for participation because the targeted audience of our engagement was organizational staff from potential eligible entities. Currently, the Department of Ecology is not able to compensate organizations or organizational employees who participate in our public processes during paid work time as representatives of their organization.

When conducting outreach to inform people and organizations of the opportunities to engage, we sought to share the information with contacts at all MSW landfills located in identified communities, including sharing the information via Ecology's website; social media; a variety of email distribution lists that Ecology manages, and with environmental and professional non-profit organizations.

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

When conducting outreach to inform people and organizations of the opportunities to engage, we sought to share the information with contacts at MSW landfills existing in all identified communities. We ultimately had participation from six of the nine MSW landfills located in identified communities.

The three landfills in identified communities that did not participate in our engagement process are:

- Pasco
- Okanogan
- City of Walla Walla

Although direct communication was sent to contacts at these MSW landfills, the lack of engagement could be due to the time and financial limitations, a lack of interest, or not enough opportunities to provide input in familiar or preferred formats such as in person sessions.

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.

During community engagement and Tribal Consultation, we asked participants what benefits this program might bring to their communities. We heard the following:

- Big financial help to small counties, closed landfills, and older landfill sites needing upgrades.
- Helps facilitate implementation of the new rule
- Could accelerate regulatory closure and beneficial use of former landfill sites

During our engagement sessions we asked participants about barriers to participation and equitably distributing the benefits of the program. We heard the following concerns:

- Having to pay for expenses up front and wait for reimbursement
- Understanding what the requirements of the rule are and what landfill owners and operators need to meet those requirements, and therefore understanding what to request funding for in the grant application
- Timing of the grant
  - Including short timeframe between the rule being final and the grant program opening
  - Because of the timing of the grant program some costs associated with compliance are not eligible (initial reporting)
  - The period of time grantees have to spend the funds is a challenge

5. Describe any plans for ongoing engagement with overburdened communities and vulnerable populations related to this action.

Ecology will share the completed Environmental Justice Assessment, including the input we heard and how we incorporated it into the grant program with people from overburdened communities and Tribes that participated in the community engagement process. We will also continue to seek input from applicants and grantees throughout the grant process on how we can improve the grant program.

## Section 8: Potential Environmental Benefits & Harms from Action

This section summarizes anticipated benefits and harms from the potential action, and to assess impacts on overburdened communities and vulnerable populations. 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. Answers to the questions in this section may have helped in strategizing our approach to engagement.

### *Identify Potential Environmental Benefits & Harms from Action*

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

This grant program will provide funding to MSW landfills to comply with the Landfill Methane Emission law (Chapter 70A.540 RCW). The funding will help alleviate the economic burden facing landfills. The grant program may even accelerate compliance for some MSW landfills. Through compliance, MSW landfills are expected to see a reduction in landfill gas emissions. Although methane is the primary gas emitted by landfills, they also emit harmful co-pollutants which can adversely impact the health and well-being of people in nearby communities. These compounds have been found to contribute to urban smog and impact human health and the environment. This grant program will thus help MSW landfills to both curb methane emissions contributing to the climate crisis and better control co-pollutants harming the health and wellbeing of nearby residents.

Another potential benefit from this program may be helping to keep consumer costs for waste removal down. Landfills face added costs to pay for upgrades to their systems to meet compliance requirements. This grant program will help landfills offset some of the added expense and could prevent those additional costs from being passed on to customers.

Lastly, this grant program provides funding opportunities to MSW landfills that are currently capturing methane and converting it into renewable natural gas for secondary use. The EPA states that, “burning landfill gas (LFG) to produce electricity destroys most of the non-methane organic compounds (including hazardous air pollutants and VOCs) that are present at low concentrations in uncontrolled LFG, reduces possible health risks from these compounds. In addition, gas collection can improve safety by reducing explosion hazards from gas accumulation in structures on or near the landfill.”<sup>22</sup> For landfills that install energy recovery devices, energy is created that can power their operations or be sold to the grid. This reduces the reliance on energy created from burning fossil fuel sources, such as coal and oil.

2. Who will primarily benefit from this action?

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<sup>22</sup> <https://www.epa.gov/lmop/benefits-landfill-gas-energy-projects>

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- MSW landfill owners who must comply with the Landfill Methane Emission law (Chapter 70A.540 RCW).
- Nearby and adjacent communities to MSW landfills likely to benefit from reduced methane emissions.

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.

MSW landfills required to meet new requirements are faced with an added economic burden. The additional cost to meet compliance requirements could be passed on to MSW customers. This grant program will fund projects to help MSW landfills with those additional costs and will help reduce economic impacts of those projects being passed on to the customers those landfills serve. This could have a greater impact if the communities the landfills serve currently experienced economic strain that for some are based on historic inequities.

Funded projects to reduce landfill gas emissions at MSW landfills that exist in communities identified as being overburdened will improve the health of people living in these communities and help to address environmental, economic and health disparities across the state.

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

One possible harm from this grant program is the timeline of the grant. Some MSW landfills are still trying to understand what the requirements of the Landfill Methane Emission law (Chapter 70A.540 RCW) means for them and what projects need to be completed to meet compliance requirements. For this reason, they are not able to ask for funding to support projects that have yet to be determined.

Additionally, landfill gas projects can take a long time to execute. The current time grant period ends June 30, 2025. Ecology expects to extend the project period for up to two years, dependent upon approval to extend the time to spend the funds, but we cannot guarantee this extension for grantees at this time. This may be a barrier to applications or to successful applicants' project implementation.

5. Who will primarily experience the harms?

The identified harms may impact eligible applicants and grantees from:

- Publicly owned/operated MSW landfills
- Closed MSW landfills
- Communities living near MSW landfills

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

We were not able to identify any harm to overburdened communities or vulnerable populations as a result of this grant program.

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

This grant program prioritizes projects in communities that have experienced a disproportionate share of environmental harms and negative health impacts. Grants funded through this program will help reduce methane emissions and other co-pollutants from MSW landfills, which will benefit the communities surrounding those landfill locations.

## 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.

To reduce mitigate, or eliminate the identified probable harm of one-time grant funding, Ecology will:

- Clearly communicate with applicants the timeline of funding so applicants can plan accordingly.
- Allow for grant projects which support MSW landfill owners in understanding compliance
- Allow for grants funds to be combined with other funding sources to leverage the dollars and create seamless integration into existing programs, while still ensuring the scope of work and distinct use of grant funds is clear.
- Consider seeking future funding for this grant program to mitigate the potential harms cause by one-time funding.



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The options to reduce, mitigate, or eliminate barriers to participating in the grant program and equitably distribute the benefits include:

- Extend the period of performance for projects that need more time, contingent on approval to extend the funding.
- Make the reimbursement process as quick and easy as possible.
- Allow costs related to understanding compliance requirements.
- Reduce administrative burden of grant application and management.
- Seek additional funding to continue compliance and projects that maximize landfill gas collection and control.

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:

- Eliminating the disparate impact of environmental harms on overburdened communities and vulnerable populations;
- Reducing cumulative environmental health impacts on overburdened communities or vulnerable populations;
- Preventing the action from adding to the cumulative environmental health impacts on overburdened communities or vulnerable populations;
- Providing equitable participation and meaningful engagement of vulnerable populations and overburdened communities in the development of the significant agency action;
- Prioritizing equitable distribution of resources and benefits to overburdened communities;
- Promoting positive workforce and job outcomes for overburdened communities;
- Meeting community needs identified by the affected overburdened community;
- Modifying substantive regulatory or policy requirements; and
- Any other mitigation techniques, including those suggested by the council, the office of equity, or representatives of overburdened communities and vulnerable populations.

To reduce mitigate, or eliminate the identified probable harm of one-time grant funding, Ecology will:

- Clearly communicate with applicants the timeline of funding so applicants can plan accordingly.

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- Allow for grant projects which support MSW landfill owners in understanding compliance
- Allow for grants funds to be combined with other funding sources to leverage the dollars and create seamless integration into existing programs, while still ensuring the scope of work and distinct use of grant funds is clear.
- Consider seeking future funding for this grant program to mitigate the potential harms cause by one-time funding.

The methods to reduce, mitigate, or eliminate barriers to participating in the grant program and equitably distribute the benefits include:

- Extend the period of performance for projects that need more time. This is contingent on the ability to reappropriate the funding for this program.
- Allow costs related to understanding compliance requirements.
- Reduce administrative burden by providing clear instructions, reducing the number of application forms and questions, providing templates, and offering additional staff capacity to provide technical support.
- We will host an info session to answer questions, share important information from the grant guidelines, and provide an overview of the application process. We will also host virtual office hours during which organizations interested in applying can ask us questions about the grant or the application. We will also be available by email ([landfillgrants@ecy.wa.gov](mailto:landfillgrants@ecy.wa.gov)) and phone during standard working hours.

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.

At this time Ecology has the ability to mitigate the potential harms a by:

- Clearly communicating with applicants the timeline of funding so applicants can plan accordingly.
- Allow for grant projects which support MSW landfill owners in understanding compliance.
- Allow for grants funds to be combined with other funding sources to leverage the dollars and create seamless integration into existing programs, while still ensuring the scope of work and distinct use of grant funds is clear.
- Consider seeking future funding for this grant program to mitigate the potential harms cause by one-time funding.

One of the options for addressing the equitable distribution of benefits that Ecology cannot address at this time is prepaying expenses instead of requiring grantees to submit invoices

for reimbursement after costs have been incurred. Due to current state agency process that ensures efficient and effective use of public funds, we are not able to offer prepayment options for grantees at this time. We understand the burden this may place on some applicants and strive to make the reimbursement request process as quick and easy as possible.

## **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](#)<sup>23</sup>.

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<sup>23</sup> <https://ecology.wa.gov/About-us/Who-we-are/Environmental-Justice/HEAL/EJ-Assessments>