2030 Strategic Plan Annual Report

2024 - Year 1

PUGET SOUND
Clean Air Agency

Our Vision

Healthy air, climate, and environmental justice for the benefit of all people in the Puget Sound region.

Our Mission

We preserve, protect, and enhance air quality and public health, enforce the Clean Air Act, support policies that reduce climate change, and partner with communities to do this work equitably.

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Introduction

In 2023, the Agency adopted its 2030 strategic plan, outlining ambitious objectives and targets to improve air quality, reduce greenhouse gas emissions, and lessen disparities in air pollution exposure across our jurisdiction. As part of our commitment to adaptive management, transparency, and collaboration, we will produce and share an annual progress report to highlight each year's main achievements and how we are measuring up to our targets.

This is our first annual progress report. Please use this report as a supplement of the original Strategic Plan, which contains more detailed information about our Agency, the roles we serve, and narratives for each objective. This context is vital for understanding the full scope that this Annual Report presents.

Activities included here span from March 2023 to March 2024, except for some targets specifying calendar or fiscal years.

Our Strategic Plan challenges the Agency to achieve 25 targets—13 related to our core work in improving air quality, climate, and environmental justice and 12 that address how we are practicing our values. Some targets are ongoing, recurring, and relevant for each year, while others are set for the duration of the plan, to be achieved by 2030. Look for the circle target symbol throughout the report as we track our 25 targets.

2023 Key Opportunities and Challenges

This year our region benefited from unprecedented support for climate and environmental justice projects at both federal and state levels through programs like the Inflation Reduction Act, Climate Commitment Act, Clean Fuel Standard, Clean Cars, and Healthy Environment for All. A new, key opportunity for the Agency has been leading the regional planning effort for the EPA's Climate Pollution Reduction Grant, part of the Inflation Reduction Act. This grant serves as a platform for collaboration and a mechanism to bring resources into the region to reduce greenhouse gas emissions.

We are falling far short of our greenhouse gas emission reduction target, so this is a key, urgent area for the Agency to focus on. Substantial and transformational changes to the way we power our transportation, buildings, and processes will need to happen to effectively reach the 50% greenhouse gas emission reduction by 2030 (from 1990 levels).

The EPA's 2024 strengthening of the fine particle pollution ambient air quality standard presents both a challenge and an opportunity for our region. Although we currently meet the standard, it provides further incentive to reduce air pollution.

Communicating complex technical air quality information in ways that enhance our community engagement and removes barriers to participation remains a key challenge.

Expanded Approach to Environmental Justice Through Focus Topics

This year, the Agency underwent a collaborative process to transition our environmental justice work from four focus communities to a broader and more impactful focus topic approach. Focus topics were selected to provide common solutions and approaches across multiple overburdened communities (see Figure 1) thus creating opportunities to scale up our work through our partnership with communities in our convener role.

Those focus topics are defined below - look for these icons embedded throughout the objectives:

Opportunities to Reduce Emissions and Exposures – collaborating across sectors to identify emission reduction opportunities, grant writing support, providing mitigation resources, etc.

Community Science and Education – community input on monitoring, youth/adult education workshops, community monitoring, and building awareness.

Compliance Engagement and Assistance – notification sharing, improving awareness, collecting input to inform policies.

Diesel Emission Reduction – identifying potential projects, grant writing support, data sharing, and informing community.

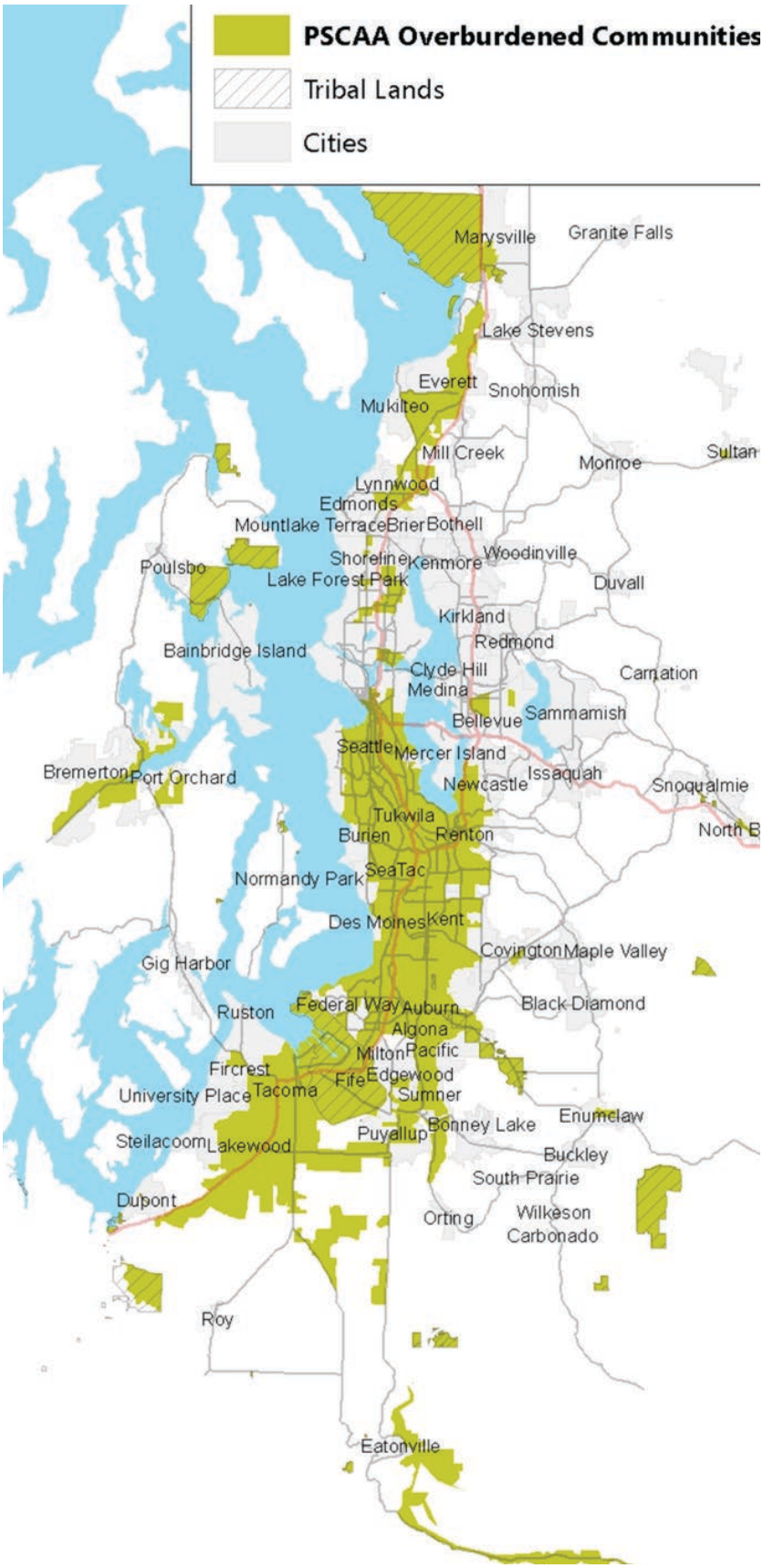
Transparency and Information Sharing - data sharing, communications, public health information, and website improvement.

Working with Tribal Nations and Tribal Organizations – identifying opportunities to collaborate, building relationships, information sharing, education and awareness of tribal history and its impact on environmental perspectives, etc.

The Agency uses a definition of Equity that refers to fairness and justice and is distinguished from equality: whereas equality means providing the same to all, equity means recognizing that we do not all start from the same place and must acknowledge and adjust for imbalances. Equity is an ongoing process requiring identification and overcoming of intentional and unintentional barriers arising from bias or systemic structures like racism, lack of opportunity, etc.

We take our unique roles as regulators and technical experts seriously, as we are able to contribute skills to the pursuit for environmental and climate justice that are unique to only our Agency.

Figure 1: Overburdened Communities Map



Systems of accountability are being established to ensure that equity is truly embedded throughout our Agency. Annual work planning for specific projects as well as individual staff planning documents will further institutionalize environmental justice across all our work and maintain accountability.

For *new* ideas to complete our environmental justice (EJ) outcomes under each focus topic, the Agency is designing a disappearing task force model where the ultimate intention is to institutionalize our values of equity and inclusion into our ongoing operations. Dubbed "scaffolding" projects, these disappearing task forces are necessary to work collaboratively and under the oversight of the EJ Steering Committee, but the goal is to establish a long-standing, durable structure for EJ programs across the Agency.

The Agency's vision of environmental justice takes two paths:

Procedural Justice: Concerned with making and implementing decisions according to fair processes. People feel affirmed if the procedures that are adopted treat them with respect and dignity. Procedural justice is a focus of Objective 1.3 – increasing our inclusivity, better understanding communities' concerns, and reducing barriers to participation.

Distributive Justice: Concerned with the fair allocation of resources among diverse members of a community. For the Agency's work, the resource is clean air – and much of our work is a component of distributive justice – improving air quality and reducing disparities in ambient air quality and exposure by focusing on areas where disparities are greatest.

A Note About Wildfire Smoke

Since summer 2017, wildfire smoke has become increasingly impactful in our region as well as across the American and Canadian West. Many of the targets included in our strategic plan (and this report) track progress with wildfire smoke days removed from datasets. We set and track these targets intentionally with wildfire smoke days removed so that we can identify and adjust types of pollution that we and partners can more directly control and influence within our region. Our annual data reports provide data both with and without wildfire smoke days included in the datasets – the former so we know what our communities were actually exposed to and the latter so we can understand locally-influenced pollution trends with this influence removed.

We plan for wildfire smoke with our public health jurisdictions and forecast levels to communicate pollution levels and how people can take steps to protect their health before and during these events. This year, we took additional steps to increase coordination through a partnership with our local health jurisdictions and state Department of Health through support from the 2023 Legislature. Wildfire smoke communication and outreach is a component of that coordination (more details in Objective 1.2).

Finally, the most important action we can take as a clean air agency to protect against wildfire smoke is to deliver with partners on our climate targets. A changing climate, compounded by years of fire suppression, has primed our forests in the West for unprecedented wildfire events. Our actions under Objective 1.4 seek to reduce our greenhouse gas emissions to help stabilize our broader climate, reducing wildfire conditions. Our actions are regional, and we seek to work with partners to implement successful projects and programs that can be replicated and built upon. The projects generated under the regional and state Climate Pollution Reduction Grant (CPRG) (see Objective 1.4) are examples.

Wildfire smoke over the forest and mountain range

Baseline Regional Goals

This progress report provides highlights for each objective of the Strategic Plan. The Strategic Plan includes four overarching regional goals related to air quality, public health, climate, and environmental justice. These are ambitious goals whose success will depend on the coordination of many partners beyond our Agency. Because these goals change incrementally, we will provide a baseline in this first annual report, as well as a mid-plan update in the 2027 progress report and do an in-depth comparison at the conclusion of the plan in 2030. Below, we provide our methodology and rationale for how we intend to track each goal.

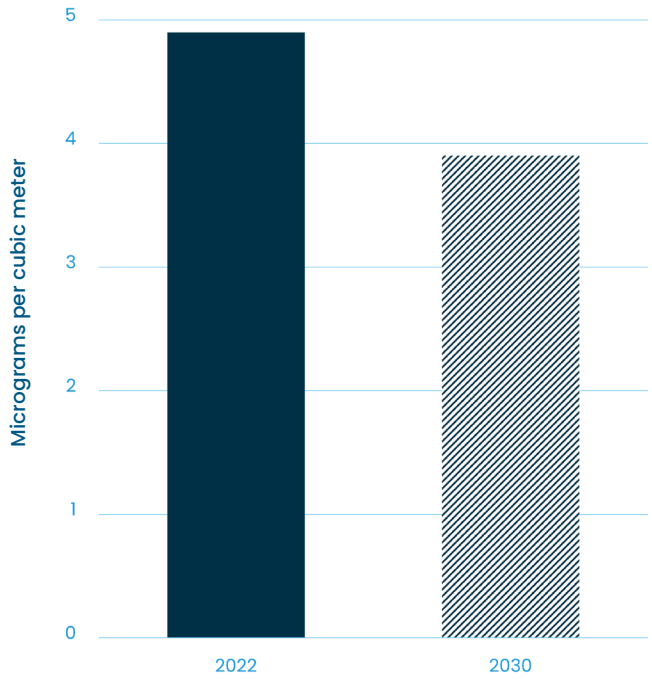
Goal 1: Air pollution overall drops by 20% from 2022 to 2030, and the annual economic impact of air pollution health effects drops by $500 million - $1 billion.

Methodology and baseline year:

Fine particle pollution ($PM_{2.5}$) drives health risk burden and associated cost to our region from air pollution. We will utilize annual $PM_{2.5}$ values from our air monitoring sites and the broader network of sensors. Our baseline 2022 value is 4.9 micrograms per cubic meter (µg/m³), making the 2030 target 3.9 µg/m³. To estimate this, we used the three-year average from all monitors and sensors in our region for 2020-2022, with wildfire smoke impacted values removed. In the 2027 annual report we will report on the economic impact component of the target, using EPA's COBRA tool. This tool relates pollution reductions with public health impacts, incorporating information from a variety of public health studies.

In Figure 2, the hashed bar shows the 2030 goal (20% less than 2022).

Figure 2: Goal 1 - 2022 Baseline Fine Particle Pollution Average and 2030 Goal



Goal 2: Cancer risk from air toxic pollutants reduces by 50% from 2022 to 2030, especially in overburdened communities.

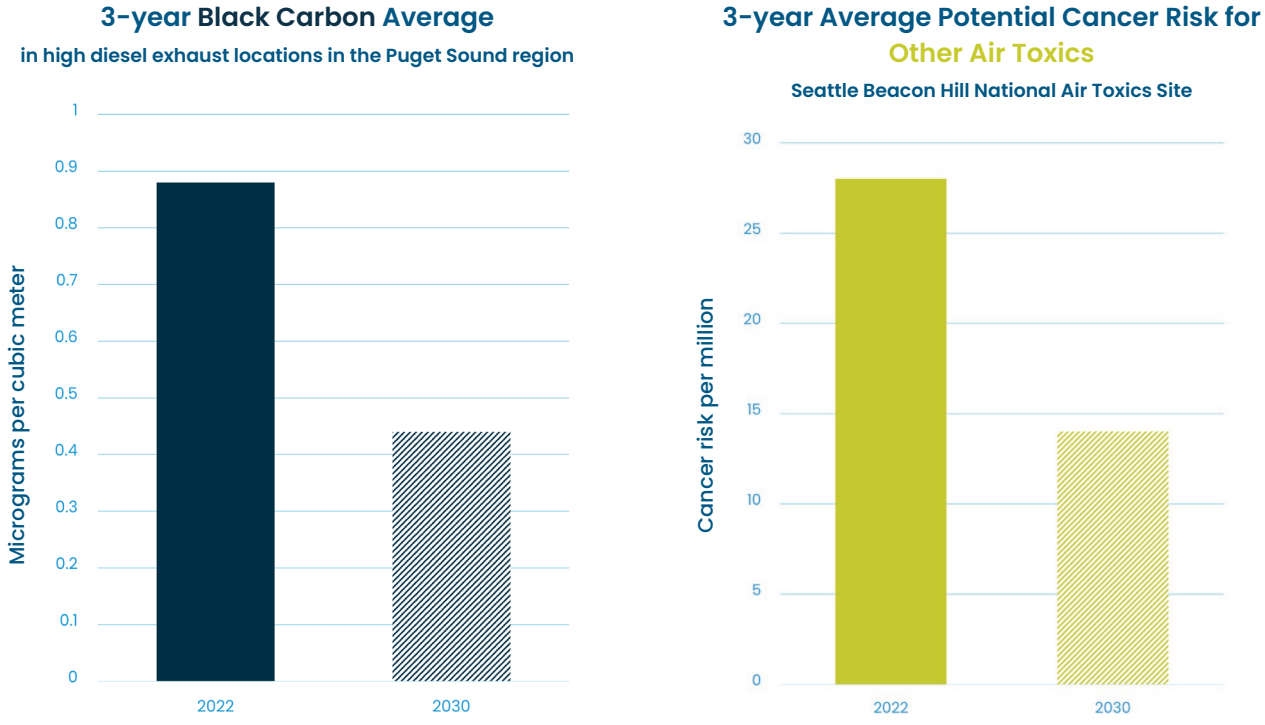
Increased cancer risk is one of several health impacts of air pollution, especially from a group of pollutants called "air toxics." Overall cancer risk for individuals and populations is impacted by many factors like lifestyle (smoking, diet, exercise) as well as genetic predisposition. The cancer risk in this section relates to the increased cancer risk from air pollution exposure.

Diesel exhaust (and specifically the particles in diesel exhaust called diesel particulate matter) *contributes more than 80%* of the potential cancer risk from air pollution in our region. To track reductions, we will utilize a combination of estimating diesel exhaust emissions and measured air toxics at the National Air Toxics Trends Site on Beacon Hill in Seattle.

For purposes of this update, we include a baseline 2022 diesel exhaust estimate based on the three-year average (2020-2022) of black carbon measurements at the five highest locations in our jurisdiction for diesel exhaust (Seattle Duwamish, Tacoma Tideflats, Seattle 10th & Weller, Kent, and Tukwila Allentown). All five of these monitors are placed in overburdened communities. Black carbon is a reasonable marker for diesel exhaust, which is challenging to directly measure.

The baseline average is 0.88 µg/m^3, corresponding to a 2030 target of 0.44 µg/m^3 (see Figure 3). The baseline 2022 value for measured air toxics at the Beacon Hill monitoring site is 28 potential cancer risk per million, corresponding to a 2030 target of 14 potential cancer risk per million. Potential cancer risk per million combines the level and toxicity of each air toxic. The greatest potential cancer risk comes from air toxics formaldehyde, benzene, carbon tetrachloride, and acetaldehyde. In Figure 3, the hashed bar shows the 2030 goal (half of 2022) for both black carbon and other air toxics averages.

Figure 3: Goal 2 - 2022 Baseline Black Carbon and Air Toxics Averages and 2030 Goal



Goal 3: Socioeconomic disparities in air pollution are cut in half from 2022 to 2030.

For this target, we examined how fine particle pollution ($PM_{2.5}$) levels differ based on race, ethnicity, and income. Using the same $PM_{2.5}$ values as in the first regional target, we were then able to assign those pollution levels based on how households responded in the 2020 census. It's important to note that the Goal One averages are for our entire 4-county population, but our strategic plan objectives challenge us to drive into much greater detail across our overburdened communities to address air pollution disparities.

In Figure 4 below, we can see that income level had the greatest impact overall to increased exposure to fine particle pollution, with those in the lowest quartile for income experiencing an increase of over 0.6 µg/m^3 compared to those who were in the highest income quartile. The next greatest impact was ethnicity, with Latino/Hispanic populations experiencing an average increase of almost 0.2 µg/m^3 compared to non-Latino/Hispanic populations. BIPOC indicates Black, Indigenous and People of Color, and for our comparison includes all census households that responded as non-white. The average $PM_{2.5}$ increase for BIPOC compared to White was slightly less than 0.1 µg/m^3. While the average BIPOC impact is small, It is important to note that there is a large range depending on individual race, as shown in Figure 5. As noted above, these are overall averages to track a general overarching goal. In Figure 4, the hashed lines show the 2030 goals (half of 2022).

Figure 4: Goal 3 – 2022 Average Difference in Fine Particle Pollution Levels Based on Income, Ethnicity and Race and 2030 Goal

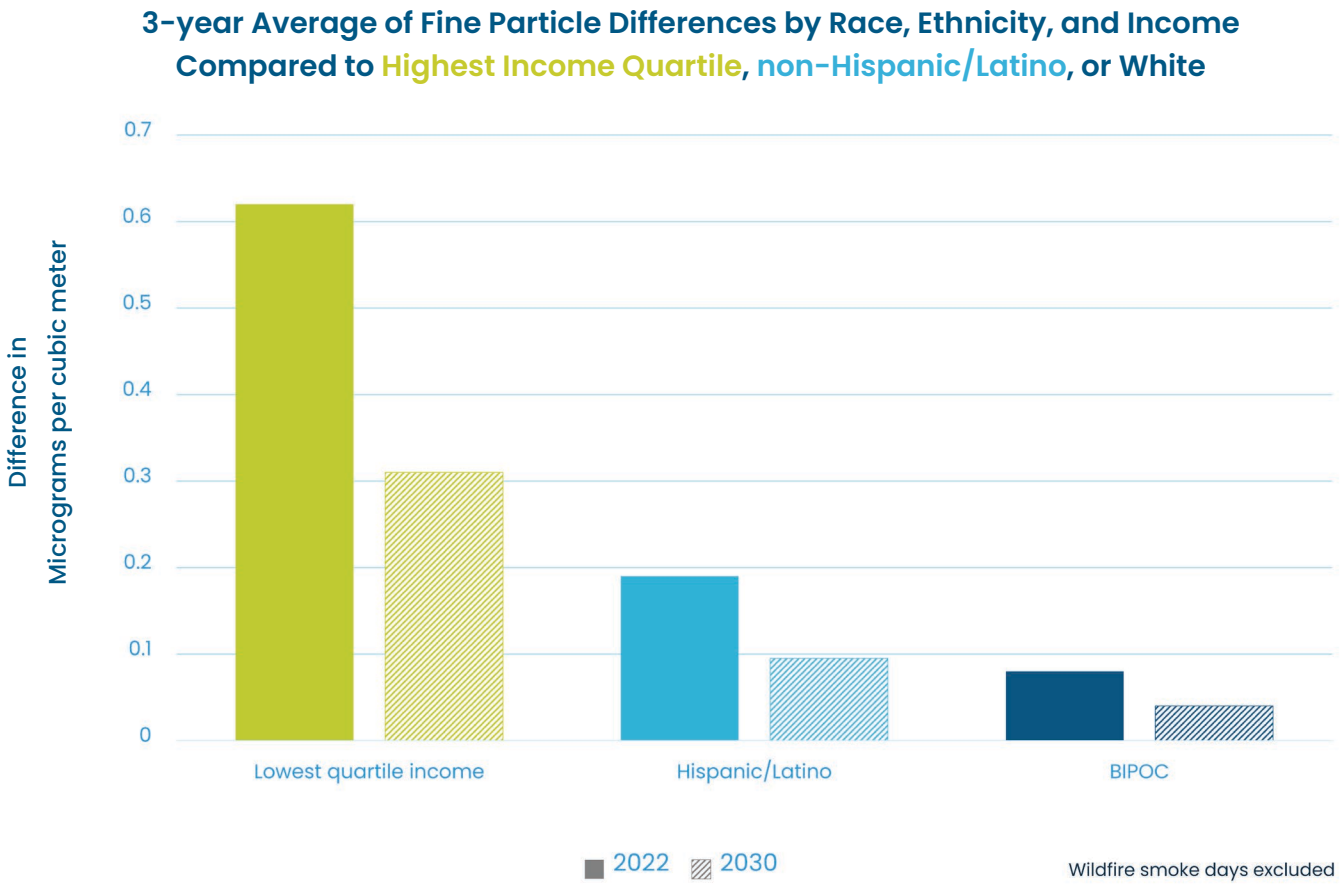
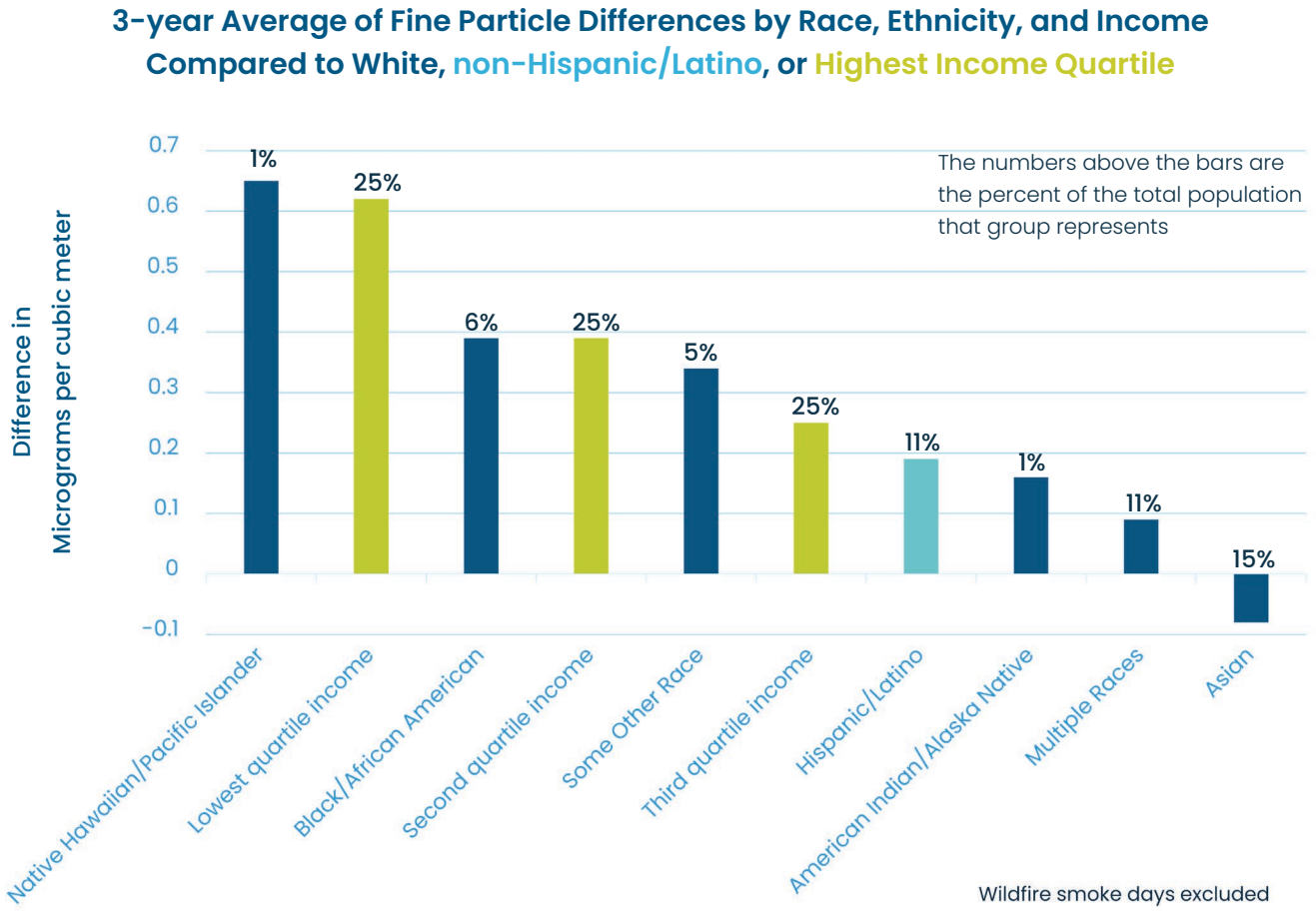


Figure 5: Goal 3 – 2022 Average Difference in Fine Particle Pollution Levels Based on Income, Ethnicity and Race (With Greater Income and Race Detail)



In Figure 5, we break down the difference in $PM_{2.5}$ levels with more detail for income and race. The % numbers above each bar represents the percentage each bar is of the total population. Once again, income level is shown in light green, with the greatest difference between the lowest quartile income and highest. A difference of 0.4 µg/m³ and 0.25 µg/m³ persists among the second and third highest quartiles compared to the highest income earners, respectively. Ethnicity is shown in the light blue and once again highlights a difference of almost 0.2 µg/m³ compared to non-Latino/Hispanic. Race is shown in dark blue, and reflects a large range, with Native Hawaiian/Pacific Islander (1% of the Puget Sound population) with an increased level of over 0.8 µg/m³ compared to the White Population, and the average Asian population (15% of the population) with a decrease of almost 0.1 µg/m³ compared to the White population. These are broad averages - some predominantly Asian communities have elevated air pollution exposure and the Agency prioritizes them through our environmental justice focus topics. Given the large range of impact across races, we will continue to report out BIPOC by race to better understand and communicate impacts as we track this overarching goal.

Goal 4: Greenhouse gas emissions in the Puget Sound region drop by 50% compared to 1990 levels overall.

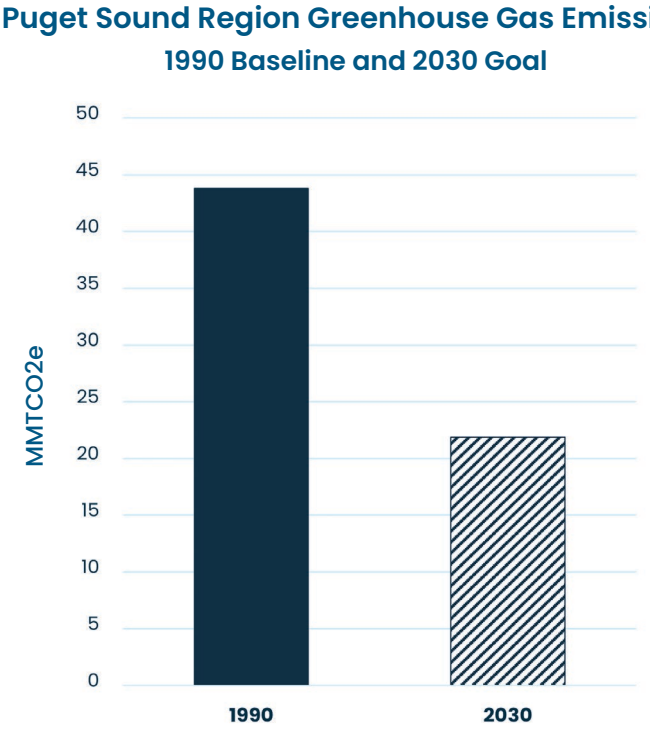
We use emission inventories to track progress on our greenhouse gas (GHG) goal. These inventories take detailed information on greenhouse gas emissions released from different types of activities and adds them together. Our goal is consistent with the Washington State greenhouse gas goal, both based on a baseline year of 1990. The estimate for our region places 1990 levels at approximately 44 Million Metric Tons of Carbon Dioxide Equivalent (MMTCo2e). This translates to a 2030 goal of 22 MMTCo2e, 50% of the 1990 level. Figure 6 (below) shows the 1990 GHG emission estimate for the four-county region, and the white hashed bar shows the corresponding 2030 goal.

The most recent 2019 inventory conducted for our region estimates emissions at 48 Million Metric Tons of Carbon Dioxide Equivalent (MMTCo2e). This shows that our region is still above the 1990 emissions level, so substantial reduction will be necessary from now to 2030 to achieve the 50% emission reduction goal.

Along with partners, we will continue to update our emission inventories at intervals throughout the strategic plan. Methodologies are regularly updated as technology and approaches are refined - these changes may be reflected in future estimates and shift them slightly. It is also important to note that GHG emissions can vary year-to-year, which is challenging as we project trends into the future and track progress.

Reducing greenhouse gases sufficiently to meet our 2030 goal (and beyond) will require sweeping, transformative changes to the ways that we power our vehicles, buildings, and industry. Reducing these emissions is imperative to avoid the most catastrophic impacts of climate change, many of which we are already seeing. The recent National Climate Assessment (NA5) documents that Climate change observations in the Northwest are consistent with projections from previous National Climate Assessments. Annual average air temperatures in the region have risen by almost 2°F since 1900. Climate damage has led to increased wildfire risk, sea level rise, extreme precipitation events, and droughts – all of which bring significant social and economic impacts.

Figure 6: Goal 4 - Greenhouse Gas Emissions with 1990 Baseline and 2030 Goal



Section One Objectives: Protect and Improve Air Quality and Public Health, Reduce Air Pollution Disparities, and Protect Our Climate

Our seven objectives highlight our various roles to protect and improve air quality and public health, reduce air pollution disparities, and protect our climate.

Objective 1.1 Meet and Surpass the Health-Based National Ambient Air Quality Standards (NAAQS)

Opportunities to Reduce Emissions and Exposures

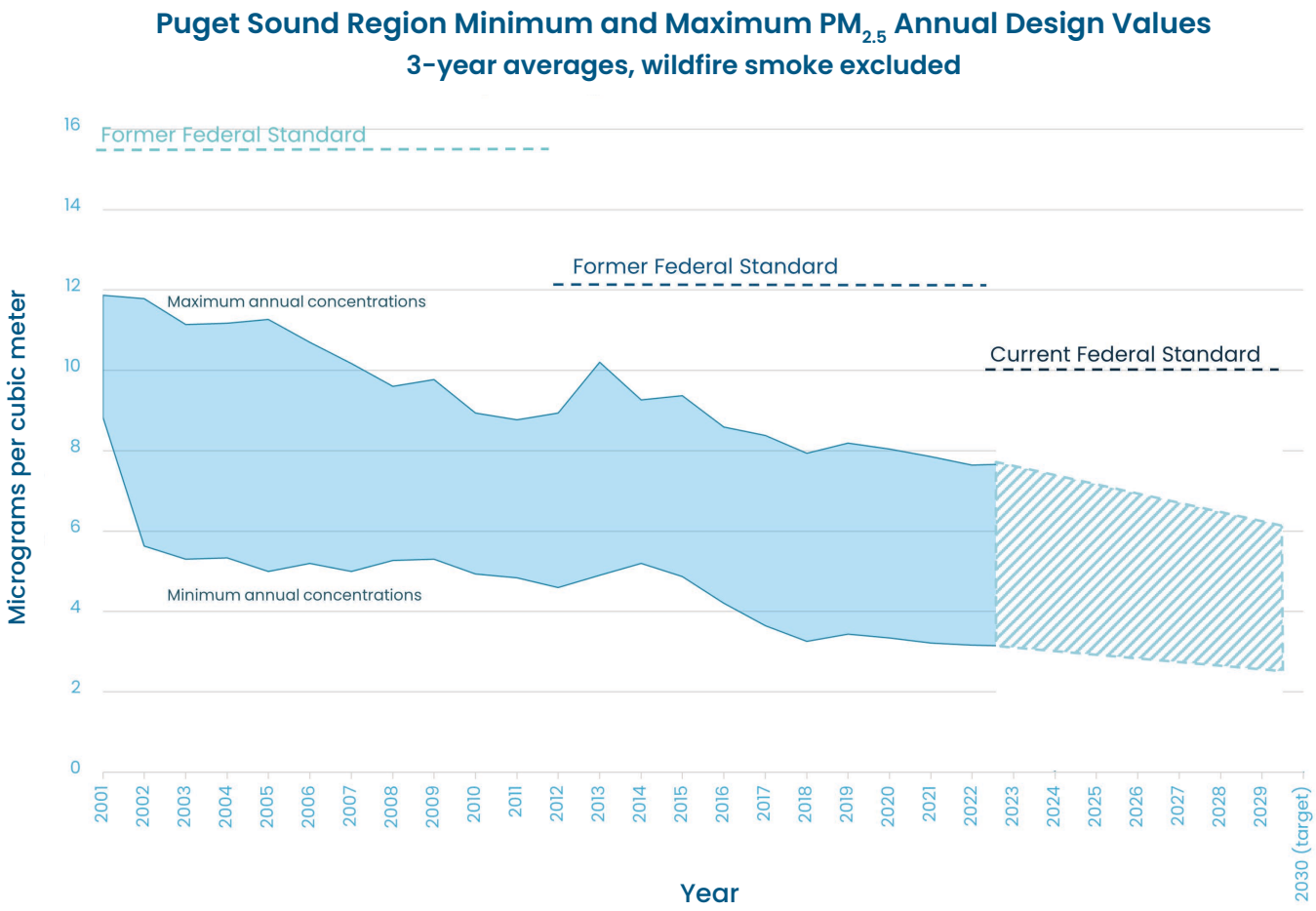
The Puget Sound region continues to maintain the National Ambient Air Quality Standards across all criteria pollutants. Agency staff reviewed regional fine particle pollution ($PM_{2.5}$) levels to show that our region is anticipated to meet the strengthened $PM_{2.5}$ NAAQS that EPA announced in February 2024. The Agency supported this strengthening to better protect public health and submitted comment letters urging EPA to do so (individually and through the National Association of Clean Air Agencies). Figure 7 shows how fine particle pollution levels have improved in our region. In 2024, staff are starting work on our second 10-year maintenance plan for the Tacoma-Pierce $PM_{2.5}$ nonattainment area to ensure the area continues to enjoy improved, healthy air.

While $PM_{2.5}$ drives the majority of health risk in our region, we continue to track ozone pollution levels that remain close to the ozone standard. This is the result of short periods of time that exceed the standard on hot summer days when ozone forms. It typically occurs in rural southeast King County.

The EPA sets national ambient air quality standards for six pollutants called "criteria pollutants." These include particulate matter (also called particle pollution), ground-level ozone, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide.

In our region, we focus on fine particle pollution (also called $PM_{2.5}$), which is the subset of particle pollution that's less than 2.5 microns in diameter. These tiny particles come from a variety of sources and have the greatest health impacts in our region including: heart and lung impacts like heart attack, stroke, and chronic obstructive pulmonary disease (COPD).

Figure 7: History of the Fine Particle Pollution Annual Average NAAQS and Regional Levels



Target

The Puget Sound region attains the National Ambient Air Quality Standards.

Status

Continued to meet.

Objective 1.2 Measure, Analyze, and Communicate Air Quality Risk

Community Science and Education

Transparency and Information Sharing

The Agency maintained its ongoing monitoring network, focused primarily on harmful fine particle pollution ($PM_{2.5}$). We continued to make information available in real time, and also published our regular annual data summary.

We completed our EPA-funded air toxics grant, and conducted community open houses in Tacoma and in Seattle to share results and discuss questions and next steps. The study highlighted that diesel particle pollution (also called diesel particulate matter, DPM) continues to present the greatest potential cancer risk from air pollution.

We started our EPA-funded Trailer Researching Environmental Equity (TREE) grant, establishing agreements, purchasing equipment, conducting listening sessions, and initiating monitoring in the first community of Lakewood in Pierce County.

Agency staff conduct a tour of air pollution monitoring equipment

We made progress establishing a new monitoring site near SeaTac Airport through EPA funding. As part of this effort, we conducted community engagement to solicit community input on placement of the monitoring site. We also researched and purchased ultrafine particle monitoring equipment through 2023 Legislative funding. Ultrafine particles are a subset of particle pollution, with a diameter of 0.1 microns or less. Health impacts of these ultrafine particles are not yet as well understood or established as other sizes like $PM_{2.5}$.

Agency staff discuss air quality concerns with community members

Through 2023 Legislative funding, we initiated an ongoing quarterly coordination with our local health jurisdictions and the state Department of Health. One goal of this group is to refine clear joint messaging to better communicate issues related to indoor and ambient air quality, as well as climate change. This year, meetings included solicitation of air quality and public health topics from the group, ambient air quality monitoring, and an overview of Healthy Homes resources.

Target

The Agency expands community science engagement events through partnerships in all overburdened communities by 2030.

Status

We have initiated this work, conducting over 20 specific engagement events in several overburdened communities. We plan to deepen this work through partnerships in future years (see map on next page).

Some of our science engagement this initial year included activities such as air quality collection with sensors, showcasing our community science functions, and presenting study results with:

1. Skykomish River Valley Community Workshop, Sultan
2. YMCA Environmental Symposium, Seattle University District
3. Green Jobs - Green Futures Summit, Seattle Fremont
4. King County Youth Conservation Corps, Seattle Beacon Hill
5. Duwamish River Community Coalition- Air Toxics Open House, Seattle South Park
6. Evergreen High School Youth Workshop, White Center
7. Metro Youth Workshop, Renton
8. Partner in Employment Workshop (PIE), SeaTac
9. Mission Africa, Kent
10. City of Auburn - Community Resource Fair, Clean Sweep, National Night Out, Auburn
11. University of Puget Sound Environmental Science and Policy class, Tacoma
12. Tacoma Pierce County Health Department - Air Toxics Open House, Tacoma

This map depicts the locations of community science engagement events.

Target

The Agency provides visual tools that clearly communicate air pollution risk information that are accessible and available in multiple languages by 2027.

Status

We continue to develop and refine our forecasting and data display tools, and will continue to create and revise technical content and improve accessibility.

Objective 1.3 Reduce Inequities in Air Pollution and Effectively Engage on Air Quality Topics

Opportunities to Reduce Emissions and Exposures

Based on our expanded environmental justice approach to overburdened communities, we re-established the Agency's longstanding Environmental Justice Steering Committee (EJSC) with the creation and adoption of a new charter. The EJSC is creating an initial internal framework to help staff guide projects across our six focus topics and incorporate equity by utilizing components of our racial equity toolkit (RE-Tool). The Committee will review how the framework is working and refine it accordingly.

As part of our ongoing commitment to fostering meaningful, inclusive, and effective community engagement, we're developing a comprehensive Community Engagement Guide. This guide is designed to serve as a cornerstone for our efforts to deepen connections with the communities we serve, ensuring that our work not only aligns with but actively supports and enhances procedural justice.

Our goal is to create a guide that is a resource to help agency staff effectively and efficiently incorporate community engagement aspects into projects, particularly taking place in overburdened communities. It acts as a testament to our commitment to community engagement and environmental justice. By making this guide easy to use and relevant to a wide range of projects, we aim to improve community engagement practices across the Agency.

Grant Writing Support

Through 2023 Legislative funding, we established a pilot program to provide grant writing support in overburdened communities. We heard from multiple community-based organizations as well as smaller jurisdictions that they didn't have expertise or bandwidth to apply for state and federal grants. To date, we have developed a webpage to provide information about the program, created a communications plan, started contacting potential entities that may be interested in this program, and responded to initial inquiries. We are also coordinating with other organizations providing technical assistance to better serve the varying needs of potential applicants. This includes sharing referrals and presenting at partners' assistance workshops to reach a larger audience.

Target

By 2030, air quality in overburdened communities improves more than air quality in the rest of the region.

Status

We will conduct comparisons in future progress reports, based on fine particle pollution ($PM_{2.5}$) that drives health risk.

Target

Complete a community engagement guide by the end of 2023 to operationalize best practices for authentic community engagement.

Status

Agency Committee is working on drafts, and soon staff can implement as part of our expanded focus topic work.

Target

Create or use an existing external environmental justice council or advisory committee to advise the Agency on its environmental justice policies, actions, and expenditures.

Status

We made progress re-establishing our internal Environmental Justice Steering Committee and will determine next steps for external input as we gain more experience with the focus topic transition.

Objective 1.4 Reduce Greenhouse Gas (GHG) Emissions to Reduce our Region's Contribution to Climate Change

Opportunities to Reduce Emissions and Exposures

In 2023, we took on the lead role for Phase I planning of the EPA's Climate Pollution Reduction Grant (CPRG) for our Metropolitan Statistical Area (MSA), extending it to our entire region. This was a new development as part of EPA's Inflation Reduction Act (IRA) programs focused on greenhouse gas emission reduction. We successfully delivered the Priority Climate Action Plan (PCAP), drawing on the coordination and expertise of our steering committee and working groups to identify and quantify actions that could result in near-term reductions of greenhouse gases.

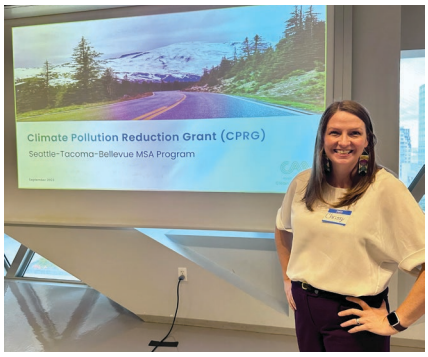
We started planning and initial actions to deliver the Comprehensive Climate Action Plan (CCAP) to EPA in 2025, which will incorporate all potential emissions reduction measures across the region. The CCAP will include a substantial community engagement component. We also coordinated with the State (Departments of Commerce and Ecology) and other partners who developed Phase II applications for implementation projects submitted to EPA this spring. Phase II applications must demonstrate connections to the quantified measures in the PCAP and will result in much-needed greenhouse gas emissions reductions in our region when implemented.

Target

The region's GHG emissions are reduced to 50% below 1990 levels by 2030 (and the region is on a trajectory to achieve the state goal of 95% below 1990 levels by 2050).

Status

Our most current estimate places us approximately 5-10% above 1990 levels. We need the successful implementation of ambitious and transformational decarbonization measures to meet the 2030 target and beyond.



Agency staff and partners at our September 2023 CPRG workshop

Objective 1.5 Prevent, Reduce, and Control Emissions and Exposure from Stationary Sources and their Regulated Activities

Compliance Engagement and Assistance

Transparency and Information Sharing

Compliance staff met all our commitments to EPA regarding our high priority inspection work in 2023. The Agency has consistently met this goal for many years. A Full Compliance Evaluation (FCE) was completed for each operating permit and synthetic minor limited source (see callout box) for the federal fiscal year (October 2022 – September 2023). Each FCE includes at least one unannounced onsite inspection coupled with the review of the required compliance report submittals to the Agency. Larger, more complex sources may receive more than one onsite inspection.

There are approximately 30 operating permit sources (the larger sources in our area) and approximately 75 synthetic minor sources (sites with enforceable emission limitations to avoid major source program requirements). All air quality compliance work associated with these sources is documented and the activity information is extracted from our database and uploaded to the EPA's database on monthly. The uploaded information is displayed and shared through EPA's ECHO (Enforcement & Compliance History Online) website which displays geographic information and source specific information related to a variety of environmental media topics (air quality, water quality, and more).

During this first year of the strategic plan, the Agency updated its online asbestos notification program, replacing a program that was developed nearly 20 years ago. This improved the interface for users, both contractors and owners, and provided more effective documentation of the notification process upon completion. It also allowed the Agency to move to a more efficient credit card processing system.

Compliance leaders also met with representatives from the Washington Department of Labor & Industries (L&I) to discuss the connections and overlaps between their asbestos program (focused on worker safety and exposure) and our asbestos program (focused on public health and exposure). These ongoing discussions are intended to clarify opportunities in our own outreach and education efforts to improve compliance with our requirements and improve public health outcomes.

Target

The Agency fully meets its EPA-delegated programs, obligations, and commitments.

Status

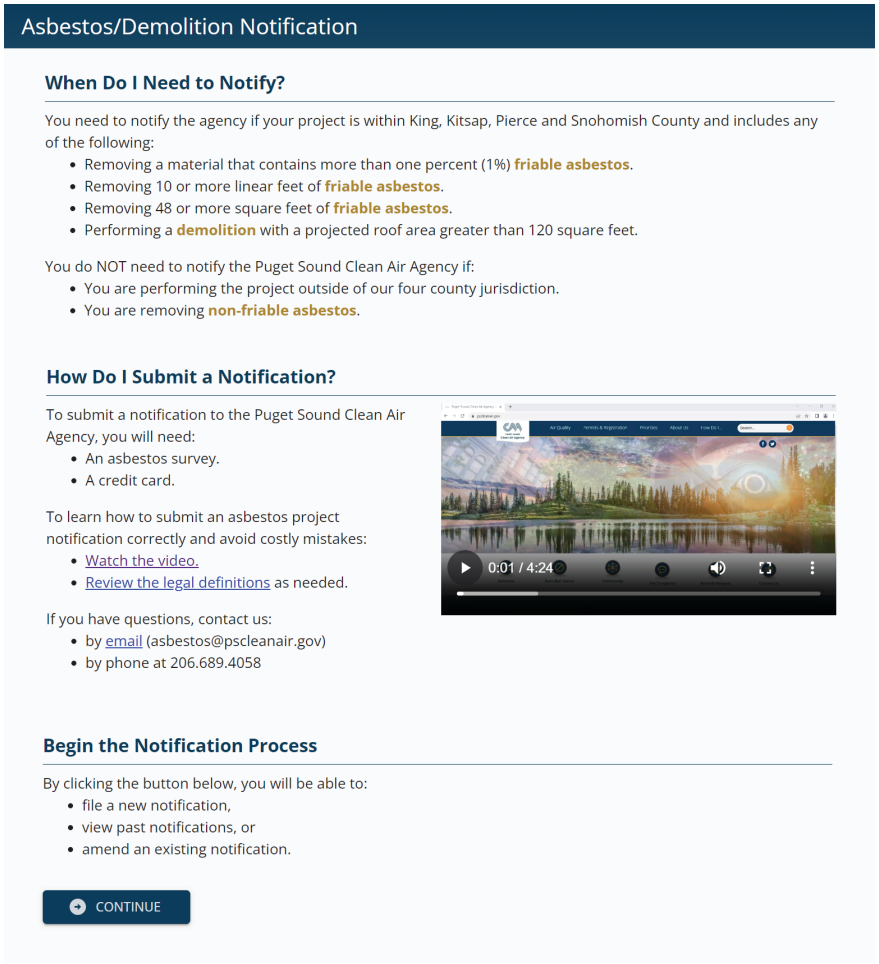
Continued to meet this target (as in previous years) and will continue to follow this goal for compliance work planning in future years.

Target

The Agency effectively adjusts implementation efforts to address air pollution prevention and public health benefit and new regulatory and scientific information.

Status

Continued to meet this target through a variety of activities (e.g. asbestos notification program update, outreach coordination with L&I). Work assignments for inspection annually are adjusted to focus on other source priorities (e.g. sources subject to federal rules delegated to the Agency and other emergent issues) beyond the EPA commitments.



Picture of our improved asbestos web page

Objective 1.6 Reduce Harmful Wood Smoke Emissions and Exposure

Opportunities to Reduce Emissions and Exposures

In November 2023, we re-launched our scrappage program to remove old polluting wood stoves from our jurisdiction. As of the end of March 2024, almost 400 people have enrolled, and recycling has been fully completed for 140 old wood stoves. The program has a target to remove almost a thousand stoves by the end of the current grant cycle (June 2025). We continue to expand ways to reach potential program participants, including print and digital advertising, as well as hiring a consultant to develop ad campaigns to reach broader audiences.

For the 2023/2024 heating season, we called one burn ban on November 25th through 28th that included Pierce and Snohomish Counties. During a burn ban, weather conditions like still, stagnant air and inversions contribute to poor air quality. The burn ban is intended to reduce residential wood smoke, a significant source of harmful fine particle pollution ($PM_{2.5}$) in the wintertime and especially during these episodes.

Wood stoves – one on its way to be scrapped and one still installed

Target

Communities most impacted by wood smoke achieve the Agency's fine particle pollution health goal each year.

Status

Our communities most impacted by wood smoke include South End Tacoma, Marysville, and Darrington. For the baseline year (2022), the $PM_{2.5}$ concentration at each location was measured as 23.5, 24.7, and 22 µg/m³ respectively. This measurement is based on EPA's daily standard statistical formula with wildfire smoke days removed. All three areas met the Agency's health goal of 25 µg/m³ for daily $PM_{2.5}$ concentrations, which is more protective than the federal daily standard of 35 µg/m³.

Objective 1.7 Reduce Harmful Diesel Emissions and Exposure

Diesel Emission Reduction

We completed three diesel-focused grants in the first year of the strategic plan, replacing 20 diesel yard trucks with all electric trucks, including installation of charging infrastructure. Grant participants conducted industry and community outreach to raise awareness and industry acceptance of electrification projects. We also coordinated with five external partners to submit a grant application in November 2023, seeking additional federal funding to replace 10 more yard trucks in overburdened communities. We continue to coordinate with many partners in anticipation of future funding opportunities.

Diesel fine particles (also known as diesel particulate matter or DPM) contribute over 80% of the potential cancer risk from air pollution in our region. While overall fine particle pollution ($PM_{2.5}$) presents most of our health impacts from air pollution in our region, fine particles from diesel exhaust contribute to potential cancer risk.

Agency staff and partners at a diesel outreach event in Tukwila

Target

Large-scale regional efforts to deploy electric drayage trucks are underway by 2030.

Status

It's exciting that electric drayage trucks are getting more attention through various efforts at the state, local, and federal levels. In future progress reports, we will report out on these efforts and more.

Target

At least 50% of diesel-powered yard trucks identified near overburdened communities are replaced with electric yard trucks by 2030.

Status

We've focused initial efforts on replacing diesel yard trucks with electric trucks at the BNSF intermodal yard in Tukwila Allentown. We have replaced 12 of 20 yard trucks there and are pursuing funding for additional replacements at this and other locations in overburdened communities. We also completed multi-year replacements with five additional partners to replace eight more diesel trucks, for a total of 20 electric trucks deployed. We are currently in the process of identifying yard trucks at other work yards in our region for action in future years.

Target

All rail operators in the region have implemented projects to replace diesel equipment by 2030, with a focus on zero-emission replacements.

Status

As noted above, the BNSF intermodal rail yard in Tukwila Allentown has started to electrify some of its equipment. Tacoma Rail has committed to electric switcher-locomotive, the first of its kind in the Northwest. We still have rail operators in our region that have yet to replace diesel equipment. Cost is a major factor in replacement and we're working to identify funding with rail operators to catalyze this transition.

Section Two: Values in Action

The objectives in this section describe *how* we apply these values to achieve our vision and mission.

Objective 2.1 Attract, Develop, and Inspire Talented Staff that reflect the Diversity of the region and Develop a Culture of Belonging

In this first year of the strategic plan we enhanced our onboarding process to ensure new staff develop an appreciation for and understanding of the work of all departments at the Agency. We also initiated a staff-led Wellness Committee. The Committee has created and adopted a charter, conducted a survey, and has plans to start offerings that are responsive to that survey.

For recruitment, we continued to follow HR industry best practices for redaction to minimize bias in our hiring. We increased the amount of information redacted for initial applicant review by the hiring manager and by sharing partially redacted materials to the interview panels.

We improved our staff feedback loop in monthly all-staff meetings through an online tool that allows staff to provide input and share concerns anonymously with either HR or the leadership team at their convenience.

Agency staff group picture at our second annual staff retreat in Everett

Target

The demographic makeup of job applicants in each position matches or is more diverse than the demographics of the Puget Sound region by 2027.

Status

In this first year, we received 345 applications for open positions. Of these, 270 indicated their race. Of those who indicated their race, 113 or 42% indicated BIPOC (black indigenous and people of color). The demographics of our region are slightly less than 40% BIPOC.

Target

The Agency retains staff by building and sustaining a culture of inclusion and belonging with emphasis on wellness, anti-racism, and growth through continuous improvement.

Status

In this first year we established an employee-led wellness committee to created several additional forms for communication and feedback.

Target

All Agency employees have professional development pathways and access to project management and process improvement training.

Status

All employees have Professional Development included in their planning activities that they discuss with their managers, including access to relevant trainings. The Agency took steps to do several larger trainings with teams this year, including StrengthsFinder, implicit bias, management training, etc.

Agency staff creating posters at our second annual staff retreat

Objective 2.2 Develop and Sustain a Culture that Embeds Equity Principles in our Day-to-day Work and Decisions

This year, we included equity components in each staff planning document that lays out their priorities and work assignments for the year. With an 'embed' approach, this tactic ensures all staff are included and supporting equity goals. It also helps ensure that staff are supported in their day-to-day work that embeds equity. We explored different staffing models to support equity more fully and effectively throughout the Agency.

We continued to provide an Equity Workshop Series for staff with diverse outside perspectives. We made implicit bias trainings available and continued to offer affinity groups to staff. In addition to staff, we provided training opportunities to our Board and Advisory Council members (e.g. Implicit Bias). Through the expanded approach to environmental justice, we have begun to revitalizing components of our racial equity toolkit.

Target

By 2026, the Agency will launch a racial equity organizational self-assessment.

Status

We will report out in a future progress report.

The Agency's February 2024 Equity Workshop Series flyer

Objective 2.3: Build and Maintain the Agency's Long-Term Financial Strength and Ensure Accountability

We are on target to deliver the 2025 fiscal budget on time, with components to address fund balances and anticipated projections for four years beyond the current planning year. This time horizon contributes to understanding longer-term impacts of decisions. Our Finance Department continued to support multiple recurring and competitive state and federal-level grants as well as process payments for our many compliance transactions.

This year, we developed a methodology to track our annual investment in overburdened communities. This accounts for investments of compliance staff actions (for example, engineers writing permits and inspectors conducting site visits) and air quality staff programs actions (for example, maintaining our monitoring network, creating air quality forecasts, and applying for and administering emission reduction grants) and applies it to overhead costs (for example, support staff time, rent, technology equipment, etc.). While much smaller than personnel costs, large grant pass-through expenses (for example, purchase of electric equipment to replace diesel equipment) will also be included in the estimate.

Because so many of our objectives prioritize actions in overburdened communities, a preliminary estimate indicates that we are already meeting the 2027 target. We will finalize a complete FY24 value based on actuals following the closeout of the FY24 fiscal year.

Target

The Agency has a balanced and sustainable budget each year.

Status

The Board adopted a balanced FY24 budget on June 22, 2023.

Target

The Agency obtains a clean audit each year.

Status

The Agency received a clean, unqualified audit in this reporting period (delivered in March 2024 for FY2023).

Target

The Agency maintains sufficient financial reserves each year.

Status

As part of our budget process, we regularly assess projections and evaluate reserves. They are sufficient.

Target

The Agency tracks its annual expenditures starting in fiscal year (FY) 24 and achieves 40% investment of its budget in overburdened communities by FY27.

Status

As noted above, we developed a methodology to assess our investment. For this initial reporting period, preliminary estimates indicate that we have already met the 2027 target. We will provide a 2024 value after we have closed out the FY24 fiscal year for definitive comparison.

Objective 2.4 Develop and Implement Technology to Succeed

Our Technology Department continued to ensure that software and hardware tools are available to staff to complete their tasks. Information is consistently available to the public (for example, through our website), and that we have the tools to communicate with stakeholders (for example, through email and phone service). We took strides to transition on-premises functions to cloud services, with initial mapping of our current on-premises infrastructure with various cloud solutions to inform our decision to implement our future cloud infrastructure.

This year, we started development on a new suite of public-facing web applications that expands our ability to take advantage of on-line credit card payments, increasing staff efficiency and providing a better user experience. Moreover, new public-facing web applications provide users with the ability to translate page text to their native language of choice.

Target

Technology (like our website, telephone, servers) is available to staff and the public 99% of the time.

Status

We did not have any unplanned technology service outages during this reporting period.

Target

On-premise infrastructure is migrated to the cloud to reduce risk and improve functionality by 2028.

Status

We analyzed our current on-premise infrastructure to identify best options for future cloud infrastructure implementation.

Objective 2.5 Model Environmental Sustainability

In this first year of the strategic plan, we continued to electrify the Agency's relatively small light-duty vehicle fleet with the purchase of one electric vehicle—bringing the total percentage of Agency all-electric zero-emission vehicles to 22%. Plug-in hybrid electric vehicles make up 11%, hybrids make up 61%, and the 6% remaining are conventional gasoline. We also continued to offer staff ORCA passes to encourage use of public transit to commute. We reduced our reliance on paper this year by eliminating the requirement for report submittals on paper from our largest regulated sources.

Target

Continue to be carbon neutral (through reducing emissions and with offset purchases).

Status

We are working on a new carbon footprint estimate. We will purchase offsets based on these estimates to account for the impact of our Agency's operations.

Target

Reduce our need to offset our greenhouse gas (GHG) emissions by 50% (from 2022) by 2030.

Status

As noted above, we are working on a new carbon footprint estimate to gauge our footprint and necessary offsets.

Conclusion and Adaptive Management

This first progress report is one component of our commitment to transparently share our progress and challenges with our communities and stakeholders. We commit to a practice of adaptive management in a 4-step cyclical process; plan, monitor, evaluate and adjust. As we're only one year into the plan, many actions are still in the planning to monitor stage, and time is needed to evaluate the effectiveness. We may adjust actions or flow in order to support the broader objectives and targets as part of this process.

One adjustment that took place in the first year of the Strategic Plan's implementation was highlighted earlier in this report. By leading the planning phase for the regional Climate Pollution Reduction Grant (CPRG), the Agency was able to further our climate objective and target in an action not fully articulated in Objective 1.4 in the Strategic Plan. This is a result of flexibility and a desire to gain the greatest leverage and impact to achieve our regional goals.

The Agency will continue to employ and build upon an Agency-wide culture of continuous improvement to both identify opportunities and strengthen existing functions that further our vision and mission.

PLEASE CONTACT US

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