

Environment



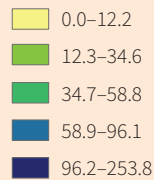
Introduction

Choices the City makes about how to grow and operate deeply affect the health and sustainability of our natural environment. Over the next twenty years, the City has an amazing opportunity to act to protect the climate and restore the natural environment. We can improve human health, make vibrant green spaces, create habitat for wildlife, generate jobs, and reduce the burdens on the environment. As a city of outstanding creativity and appreciation of the natural environment, Seattle can set an example that inspires others and leads to improvements beyond the City's actions by demonstrating what a strong, climate-friendly economy can look like. The City can make investments to restore green spaces and creeks and develop a twenty-first-century transportation system that integrates old (walking, biking, cars) and new (light rail, car sharing) approaches. Measures like these can help a growing region accommodate people and jobs in urban areas, create livable communities, and reduce the impacts of sprawl.

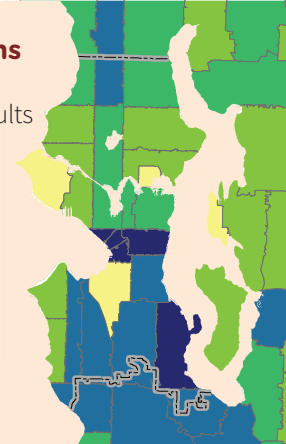
Seattle is committed to understanding how its decisions impact different individuals and communities. To fulfill its vision for race and social equity, the City must ensure that environmental benefits are equitably distributed and burdens are minimized and equitably shared.

Exposure to indoor and outdoor pollutants increases the risks of hospitalization for people with asthma. There are large racial, income, and geographic disparities in the hospitalization rates for asthma. Within Seattle, Beacon Hill, Southeast Seattle, Downtown, and the Central Area have the highest rates of hospitalization for asthma, and these are among the highest rates in King County.

Adult Asthma Hospitalizations by Zip Code 2008 to 2012 Average Annual Rate per 100,000 Adults



Source: Public Health – Seattle & King County:
Community Health Indicators Project.



The City is actively working to reduce future greenhouse gas emissions. But because of past emissions we know that some amount of climate change is now inevitable. The City must learn to understand and adapt to these changes.

This element of the Plan contains goals and policies that are relevant to all other elements of this Plan. And other elements also touch on environmental policies specific to those topics. For example, the Plan's Land Use element considers policies that regulate development near environmentally critical areas, and the Transportation element addresses how various types of transit could impact or improve outcomes for the environment.

Land

Discussion

Seattle's growth and identity have been profoundly shaped by its stunning natural landscape. The first native and European settlers were drawn here by the area's natural bounty as well as the economic value of the land for logging and resource extraction. Today, our city has become a magnet for those attracted to its lush landscapes and access to the exceptional natural places in the region. Over time, our relationship and interaction with the land has changed dramatically, but its critical importance in our lives remains.

Although the region looks very different than it did when European settlers first arrived 150 years ago, Seattle's trees, vegetation, and soils still make up a vitally important system that

manages water runoff, cleans the air, mitigates greenhouse gas emissions and impacts, improves human health, and reduces the heat island effect. This natural system also provides wildlife habitats, supports livable neighborhoods, and is integral to the essential character of the Emerald City.

GOAL

EN G1 Foster healthy trees, vegetation, and soils to improve human health, provide wildlife habitats, improve drainage, give residents across the city access to nature, provide fresh food, and increase the quality of life for all Seattleites.

POLICIES

EN 1.1 Seek to achieve an urban forest that contains a thriving and sustainable mix of tree species and ages, and that creates a contiguous and healthy ecosystem that is valued and cared for by the City and all Seattleites as an essential environmental, economic, and community asset.

EN 1.2 Strive to increase citywide tree canopy coverage to 30 percent by 2037 and to 40 percent over time.

EN 1.3 Use trees, vegetation, green stormwater infrastructure, amended soil, green roofs, and other low-impact development features to meet drainage needs and reduce the impacts of development.

EN 1.4 Increase the amount of permeable surface by reducing hardscape surfaces where possible and maximizing the use of permeable paving elsewhere.

EN 1.5 Promote sustainable management of public and private open spaces, trees, and vegetation by preserving or planting native and naturalized vegetation, removing invasive plants, improving soil health, using integrated pest management, and engaging the community in long-term stewardship activities.

EN 1.6 Strive to manage seven hundred million gallons of stormwater runoff each year with green stormwater infrastructure by 2025.

EN 1.7 Promote the care and retention of trees and groups of trees that enhance Seattle's historical, cultural, recreational, environmental, and aesthetic character.

EN 1.8 Encourage gardening and food production by residents as a way to make fresh, healthy food available in the city.

Water

Discussion

Seattle is a city of water. Puget Sound, Lake Washington, Lake Union, the Lake Washington Ship Canal, the Duwamish River, Green Lake, urban creeks, and small lakes all enhance the quality of life for the people and wildlife that live here. Four species of salmon—including the threatened Chinook salmon—call this area home, as do resident trout, blue herons, bald eagles, and a variety of other water-dependent species. Seattle’s major waterways bustle with business and recreational opportunities, while also supporting one of the premier industrial seaports on the West Coast. Moreover, Seattle’s aquatic areas give residents the chance to enjoy and experience nature close to home.

Yet despite their integral place in the local culture, landscape, and economy, Seattle’s aquatic resources have been significantly degraded as a result of urban growth. A six-mile stretch of the Duwamish River is now a federal Superfund site. Over 90 percent of Seattle’s 146 miles of shoreline have been modified and now lack natural connections to the water. The city’s creeks have seen stormwater flows equivalent to some rivers. Fish in local waters contain high amounts of mercury and PCBs, and some of our coho salmon are dying before they can reach Seattle streams to spawn. Yet even these resources, polluted as they may be, have amazing vitality and resilience. They have the potential to become even greater assets to Seattleites.

GOAL

EN G2 Foster healthy aquatic systems, including Puget Sound, lakes, creeks, rivers, and the associated shorelines, to provide a high-quality of life in Seattle for all its residents and a valuable habitat for fish and wildlife.

POLICIES

EN 2.1 Protect and improve water and sediment quality by controlling pollution sources and treating stormwater through best management practices.

EN 2.2 Reduce combined sewer overflows by reducing stormwater inflows and increasing storage in combined system areas.

EN 2.3 Seek to clean up existing contaminated sediments.

EN 2.4 Limit the use of chemicals that have negative impacts on aquatic or human health, especially on City-owned property or rights-of-way.

EN 2.5 Manage flows in creeks to support a variety of aquatic life and to control flooding and property damage caused by unregulated flows.

EN 2.6 Promote quality wildlife habitats in Seattle’s waterways by protecting and improving migratory fish passageways, spawning grounds, wetlands, estuaries, and river mouths.

Climate

Discussion

Climate change is a challenge of sobering magnitude and urgency. To confront it, Seattle will need to draw on its own capacity for resilience and innovation. The ways we use our land, design our buildings, and get around the city significantly impact the amount of energy we use and the greenhouse gas emissions we produce. One of the key ways the City will work toward its climate goals is through the urban village strategy. Cars and trucks are Seattle’s largest source of greenhouse gas emissions, and concentrating new housing and jobs in urban centers and urban villages near frequent transit service will reduce motorized-vehicle use in the city.

While concerted efforts to decrease greenhouse gas emissions can help address climate change, emissions from past decades and ongoing emissions will continue to affect the global climate. The most significant changes to the Pacific Northwest will be to temperature, precipitation, and sea level. The projected flooding, heat waves, and extreme high tides are not new challenges in Seattle, and the City has strategies for responding to them. However, climate change will shift the frequency, intensity, and timing of these events. If we don’t prepare for these types of events now, they will significantly impact the city’s health, infrastructure, and economy.

Marginalized populations are at greater risk from the impacts of climate change because they have the fewest resources to respond to changing conditions. Taking action to reduce the impacts of climate change and foster resilience in these communities is critical, as will be supporting their recovery after extreme events.

GOAL

EN G3 Reduce Seattle’s greenhouse gas emissions by 58 percent from 2008 levels by 2030, and become carbon neutral by 2050.

POLICIES

- EN 3.1** Expand transit, walking, bicycling, and shared-transportation infrastructure and services to provide safe and effective options for getting around that produce low or zero emissions.
- EN 3.2** Aspire to meet the growing demand for conveniently located homes and businesses in pedestrian-friendly neighborhoods where residents can walk to a variety of recreation and service offerings.
- EN 3.3** Implement innovative policies, such as road pricing and parking management, that better reflect the true cost of driving and therefore lead to less automobile use, while employing strategies that mitigate impacts on low-income residents.
- EN 3.4** Encourage energy efficiency and the use of low-carbon energy sources, such as waste heat and renewables, in both existing and new buildings.
- EN 3.5** Reduce the amount of waste generated while at the same time increasing the amount of waste that is recycled and composted.
- EN 3.6** Reduce the emissions associated with the life cycle of goods and services by encouraging the use of durable, local products and recycled-content or reused materials, and recycling at the end of products' lives.
- EN 3.7** Support a food system that encourages consumption of local foods and healthy foods with a low carbon footprint, reduces food waste, and fosters composting.

GOAL

- EN G4** Prepare for the likely impacts of climate change, including changing rain patterns, increased temperatures and heat events, shifting habitats, more intense storms, and rising sea level.

POLICIES

- EN 4.1** Consider projected climate impacts when developing plans or designing and siting infrastructure, in order to maximize the function and longevity of infrastructure investments, while also limiting impacts on marginalized populations and fostering resilient social and natural systems.
- EN 4.2** Prioritize actions that reduce risk and enhance resilience in populations nearest the likely impacts of climate change, including especially marginalized populations and seniors, since these groups often have the fewest resources to respond to changing conditions and therefore may be more severely impacted.

Environmental Justice

Discussion

Marginalized populations are more likely than other Seattle residents to live close to pollution sources. This is because rents are often lower in these areas. However, living in those places could expose those populations to potential negative effects of the nearby pollution. Seattle wants to make the city a safe and healthy city for all people who live here.

GOAL

EN G5 Seek to ensure that environmental benefits are equitably distributed and environmental burdens are minimized and equitably shared by all Seattleites.

POLICIES

- EN 5.1** Consider the cost and benefits of policy and investment options on different communities, including the cost of compliance as well as outcomes.
- EN 5.2** Prioritize investments, policies, and programs that address existing disparities in the distribution of environmental burdens and benefits.
- EN 5.3** Prioritize strategies with cobenefits that support other equity goals such as promoting living wage jobs or enhancing social connectedness.
- EN 5.4** Assess facilities and services periodically to determine the environmental impacts they may be having on marginalized populations, and identify ways to mitigate those impacts.