

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 20 years, the City will have an amazing opportunity to protect the climate and restore the natural environment in ways that can improve human health, make vibrant green spaces, create habitat for wildlife, generate jobs, and reduce the burdens of a degraded environment. As a city of outstanding creativity and appreciation of the natural environment, Seattle can set an example that can inspire others and lead to improvements beyond the City's actions by demonstrating what a strong, climate-friendly economy can look like. City actions could include making investments to restore green spaces and creeks, developing a 21st 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 to reduce the impacts of sprawl and create livable communities.

Seattle is committed to understanding how decisions impact different individuals and communities in order to fulfill the City's vision for race and social equity that environmental benefits are equitably distributed and burdens are minimized and equitably shared. While the City must push to reduce future greenhouse gas emissions, past emissions mean that some amount of climate change is now inevitable, and the City must learn to understand and adapt to these changes.

This element of the Plan contains the goals and policies that are relevant across all other elements. Other elements also contain environmental policies that are specific to those topics. For example, the Plan's Land Use Element takes into account policies that regulate development near environmentally critical areas such as wetlands and stream corridors, and the Transportation Element addresses how various types of transit could impact or improve outcomes for the environment.

Goals and policies in this Element's different sections overlap and interrelate with goals and policies in other elements that address environmental concerns. Therefore, implementation of these goals and policies will be most effective when this element is considered as a whole — fostering opportunity to identify strategies, which will advance all of the Plan's goals.

Land

Discussion

Seattle's growth and identity has been profoundly shaped by our stunning natural landscape. The first native and European settlers were drawn here by natural bounty as well as the economic value of the land for logging and resource extraction. Today, our city has instead become a magnet for people

attracted to its lush landscapes, fresh food, and location in a region of exceptional places. Over time, our relationship and interaction with the land has changed dramatically, but its critical importance in our lives has remained the same.

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 run-off, cleans the air, mitigates climate change 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

EG1 Foster healthy trees, vegetation, and soils to improve human health, provide wildlife habitats, reduce drainage costs, give residents across the city access to nature, and increase the quality of life for all Seattleites.

POLICIES

- E1.1 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.
- E1.2 Strive to increase citywide tree canopy coverage to 40% over time.
- E1.3 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.
- E1.4 Increase the amount of permeable surface by reducing hardscape surfaces where possible and maximizing the use of permeable paving elsewhere.
- E1.5 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.
- E1.6 Strive to manage 700 million gallons of stormwater runoff each year with green stormwater infrastructure by 2025.
- E1.7 Promote the care and retention of trees and groups of trees that enhance Seattle's historical, cultural, recreational, environmental, and aesthetic character.

Water

Discussion

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

Yet despite their integral place in local culture, landscape, and economy, Seattle's aquatic resources have been significantly degraded over the past 150 years of urban growth. As a result, a six-mile stretch of the Duwamish River is a federal Superfund site. Over 90% 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 PCB's, and some of our coho salmon are dying before they can reach Seattle streams to spawn. Yet, even though they are considered polluted, these aquatic environments still have amazing vitality and resilience, maintaining the potential to become an even greater asset to Seattleites.

GOAL

EG2 Foster healthy aquatic systems, including Puget Sound, the lakes, creeks, rivers, and the associated shorelines, to provide a high quality of life in Seattle for all its residents and valuable habitat for fish and wildlife.

POLICIES

- E2.1 Protect and improve water and sediment quality by controlling pollution sources and treating stormwater through best management practices.
- E2.2 Reduce combined sewer overflows by reducing stormwater inflows and increasing storage in combined system areas.
- E2.3 Seek to clean-up existing contaminated sediments.
- E2.4 Limit the use of chemicals that have negative impacts on aquatic or human health, especially on City-owned property or rights-of-way.
- E2.5 Achieve and manage flows in creeks to support a variety of aquatic life and control flooding and property damage caused by unregulated flows.

- E2.6 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, requiring us to draw on Seattle's extraordinary capacity for resilience and innovation. How we use our land, how we design our buildings, and how we get around significantly impact the amount of energy we use and greenhouse gas (GHG) emissions we produce. One of the key ways the City aims to achieve its climate goals is the Urban Village Strategy. Since cars and trucks are Seattle's largest source of greenhouse gas emissions, concentrating new housing and jobs near one another and near frequent transit service in urban centers and urban villages will reduce motorized vehicle use in the city.

While concerted efforts to decrease greenhouse gas emissions are critical, emissions from past decades and ongoing emissions will continue to affect the global climate. The most significant changes projected for 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, magnitude, and timing of these events. Without preparation for these changes, these events will significantly impact the community's health, infrastructure, and economy.

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

GOAL

- EG3 Reduce Seattle's greenhouse gas emissions by 58 percent from 2008 levels by 2030 and become net carbon neutral by 2050.

POLICIES

- E3.1 Expand transit, walking, bicycling, and shared transportation infrastructure, and services to provide safe and effective options for getting around that also produce low or zero emissions.
- E3.2 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.

- E3.3 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 which mitigate impacts on low income residents.
- E3.4 Encourage energy efficiency and the use of low-carbon energy sources, such as waste heat and renewables, in both existing and new buildings.
- E3.5 Reduce the amount of waste generated while at the same time increasing the amount of waste that is recycled and composted.
- E3.6 Reduce the emissions associated with the lifecycle of goods and services by encouraging the use of durable, local products, recycled-content or reused materials, and recycling at the end of products' lives.
- E3.7 Support a food system that encourages consumption of local foods and healthy foods with a low carbon-footprint, minimizes food waste, and fosters composting.

GOAL

- EG4 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

- E4.1 Consider projected climate impacts when developing plans or designing and siting infrastructure, to maximize the function and longevity of infrastructure investments, while also minimizing impacts on marginalized populations, and fostering resilient social and natural systems.
- E4.2 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

GOAL

- EG5 Seek to ensure that environmental benefits are equitably distributed and environmental burdens are minimized and equitably shared by all Seattleites.

POLICIES

- E5.1 Consider the cost and benefits of policy and investment options on different communities, including the cost of compliance as well as outcomes.
- E5.2 Prioritize investments, policies, and programs that address existing disparities in the distribution of environmental burdens and benefits.
- E5.3 Prioritize strategies with co-benefits that support other equity goals such as promoting living wage jobs or enhancing social connectedness.