

Climate and Environment

VISION

Bellevue embraces its stewardship of the environment by protecting and enhancing natural systems, accelerating decarbonization and clean energy, addressing the impacts of climate change and building for a sustainable future.

As growth and development occurs, Bellevue is working to build a greener, more sustainable and climate resilient future for generations to come. New buildings and infrastructure are designed to have a positive impact on the environment and to protect and even restore natural systems. The community highly values and celebrates the results, such as reduced energy use and greenhouse gas emissions, cleaner air, increased tree canopy and more salmon in local streams.

CLIMATE AND ENVIRONMENT SCOPE

The Climate and Environment element is about how the city restores, protects and enhances Bellevue's built and natural environment to increase resiliency and sustainability and address the impacts of climate change.



INTRODUCTION

The City of Bellevue has long been known as a "City in a Park." Located between the shores of Lake Washington and Lake Sammamish, Bellevue contains unique, environmentally sensitive wetlands and urban forests that provide amenities for residents and key habitat corridors for wildlife. Bellevue is also a rapidly growing and urbanizing city, known as a regionally important jobs center, retail and tourism destination and home to diverse cultural attractions.

Like all cities in our region, Bellevue also faces worsening and accelerating impacts from climate change, while working to mitigate and repair existing environmental damage. Reducing greenhouse gas emissions, increasing citywide resilience to climate impacts and protecting and enhancing Bellevue's urban ecosystems require the coordinated efforts of government, businesses and the community. The City of Bellevue serves as chief steward of the city's environment and assumes responsibility for the implementation of federal and state environment statutes, such as stormwater management and critical areas protection. Through regulations programs and incentives, the city encourages the preservation, restoration and improvement of the natural environment in an urban setting.

ENHANCING OUR "CITY IN A PARK"

Bellevue's park-like setting is a defining characteristic of the city and is created by more than open spaces, ball fields and playgrounds. As a "City in a Park," Bellevue is made up of streams and lakes that are home to protected species of fish and other aquatic life; dense forests of madrona, cedar and Douglas fir trees where hundreds of species of birds and even large mammals can thrive; unique wetlands that provide peacefulness and recreation and a balanced web of ecosystem functions. These valuable environmental resources exist across multiple land use classifications and therefore require a restoration approach that prioritizes involvement from diverse stakeholders and takes advantage of opportunities for public-private partnership.

To address climate change and preserve Bellevue's "City in a Park" character, the city has set ambitious targets to preserve and protect natural systems including our urban forests along with targets for reducing greenhouse gas emissions, increasing mobility options and electrifying car infrastructure, reducing energy use, transitioning to renewable energy and reducing consumption and waste.

As Bellevue has matured, environmental sustainability and climate resilience have assumed a higher priority in public policy. A community that embraces sustainability must continually improve and adapt its built environment to function within natural limits, while restoring and reconnecting to its natural environment. This includes actions such as:

- Minimizing and eventually eliminating greenhouse gas emissions,
- Investing in the citywide transition to renewable energy sources,
- Minimizing the susceptibility of environmentally sensitive areas to damage and increasing their resilience to future climate impacts,
- Minimizing the rate at which resources are consumed to below the rate at which they can be replenished,
- Minimizing the amount of noise, waste, and emissions generated to what the natural world can absorb without negative impact,
- Maximizing open space, habitat, and opportunities for recreation,
- Increasing communitywide climate resilience, with an emphasis on the most vulnerable populations,
- Improving infrastructure systems to support healthy, sustainable living for people and wildlife.

Bellevue evaluates the impact of administrative and legislative decisions on the urban environment—with particular attention to climate change and impacts on environmentally sensitive areas—and seeks to align and integrate environmental sustainability with its other important responsibilities (for example, public safety, infrastructure needs and economic development). Additionally, Bellevue evaluates its policies and decisions to account for current and future climate change to ensure that growth occurs sustainably and resilience is factored into city decision-making. Bellevue recognizes the



ELECTRIC VEHICLES

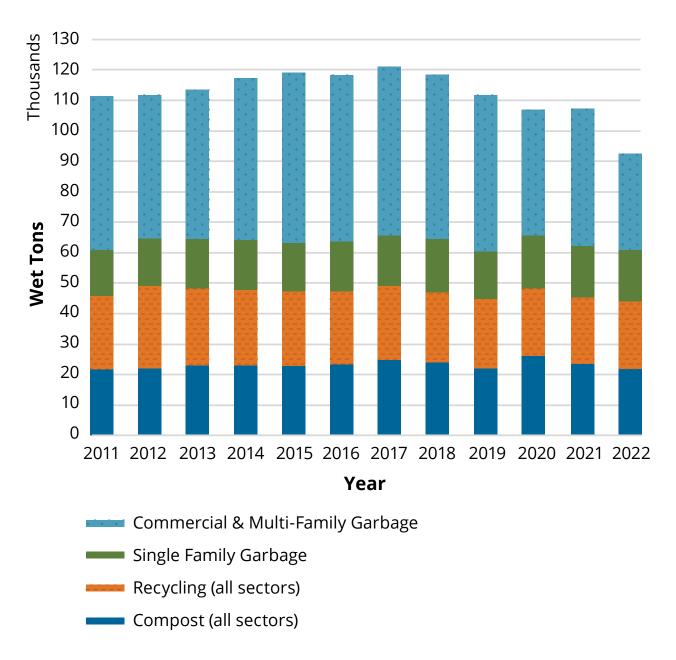
Bellevue has been a leader in supporting the growth of electric vehicle adoption. The City is actively working to expand the number of electric vehicle charging stations throughout the city, ensuring that residents, visitors, employees and the city's own fleet can take advantage of low-cost, zero-emissions forms of transportation.

WHAT ARE CRITICAL AREAS?

The Growth Management Act requires cities and counties to adopt regulations for the protection of environmentally critical areas, which include wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, areas of frequent flooding and geologically hazardous areas. Critical areas may not be suitable for development, either because they are environmentally sensitive or it is not safe to build near them.

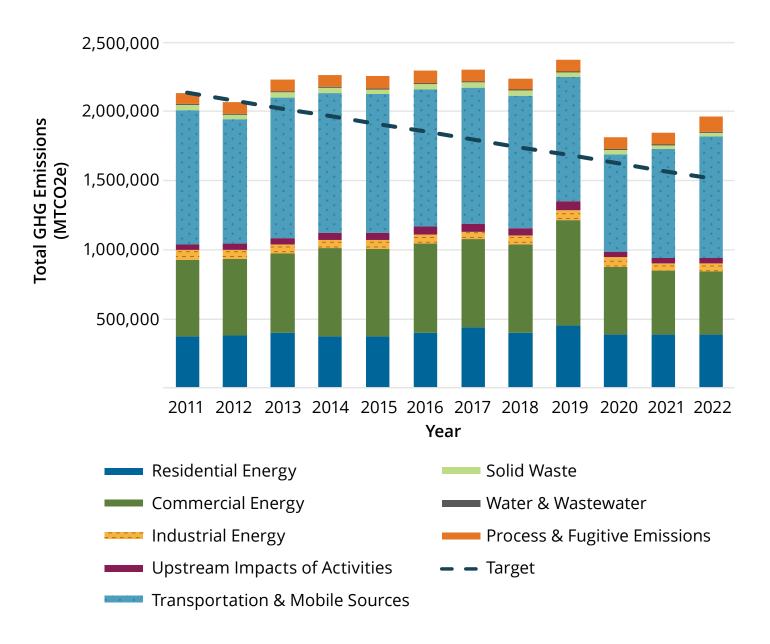
importance of protecting the environment and stable climate that have attracted so many people to the city, while ensuring sustainable growth and urbanization to provide for the needs of the growing number of residents and businesses that call Bellevue their home.

Figure CL-1. Solid Waste Generation and Diversion



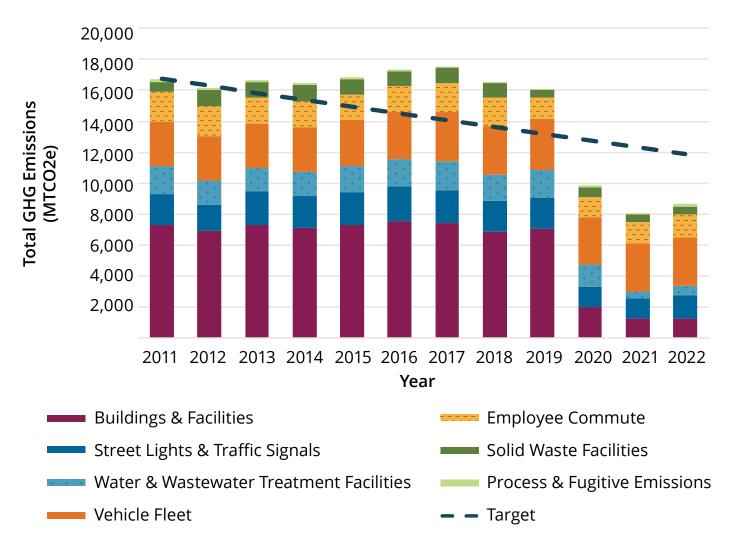
Source: City of Bellevue.

Figure CL-2. Bellevue Citywide Community GHG Emissions by Sector



Source: City of Bellevue. 2023. GHG Inventory.

Figure CL-3. Bellevue's Municipal GHG Emissions by Sector



Source: City of Bellevue. 2023. GHG Inventory.



TODAY'S CONDITIONS AND TOMORROW'S PROJECTIONS

Climate Change and the Environment Today and Tomorrow

Bellevue's attractiveness as a place to live, work and play depends on preserving and enhancing the natural assets of the community and increasing the city's climate resiliency, while simultaneously nurturing sustainable economic growth and social vibrancy.

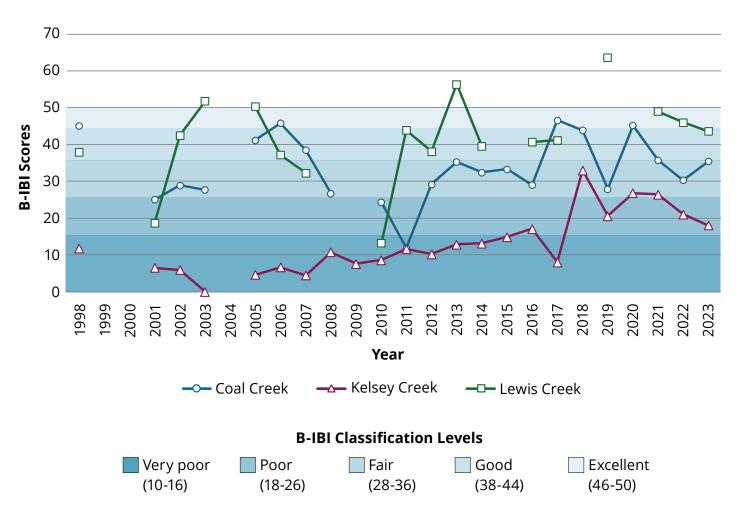
While Bellevue is renowned for its waterways, parks, forests and wildlife habitat, conditions in these environments have been under pressure, due to climate change and unsustainable historical urban development patterns and practices. The city's significant recent development and population growth have resulted in an overall increase in impervious surface, heat island effect and declines in the extent and quality of wildlife habitat, especially for aquatic species. Like most urban streams in the Puget Sound lowlands, all of Bellevue's major streams are classified as biologically impaired. In addition to impacts from unsustainable development and toxic pollution, Bellevue's urban streams and lakes face climate impacts that threaten to further degrade conditions necessary for aquatic wildlife to thrive.

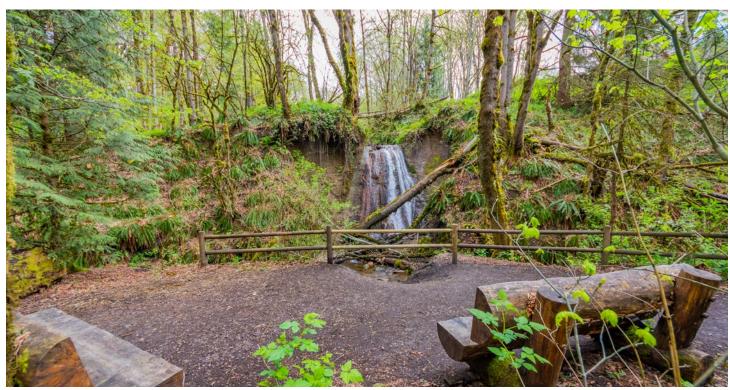
ENVIRONMENTAL STEWARDSHIP PLAN

The Environmental Stewardship Plan is a strategic action plan which guides the efforts of the city to achieve short and long-term environmental goals and targets, both community-wide and for its own municipal operations.

At the same time, some environmental conditions have improved alongside recent growth and development: Bellevue's urban tree canopy has increased since 2011 and is at its 40 percent citywide target; the city has increased mobility options and is expanding its multimodal transportation network, building out miles of pedestrian and bicycle facilities that will connect to Eastrail and the East Link Light Rail. The city has made significant progress in its transition to electric vehicles (EV), and has one of the highest EV adoption rates per capita in the U.S. The city has also made progress in reducing municipal and per capita community greenhouse gas (GHG) emissions, despite significant population and job growth.

Figure CL-4. Bellevue Stream Water Quality





In addition to environmental impacts from development, both positive and negative, Bellevue is already experiencing the direct impacts of climate change. These impacts range from extreme heat, such as the 2021 Heat Dome event, to extreme rainfall events and flooding. As climate change worsens and accelerates, the City of Bellevue plays a critical role in both mitigating greenhouse gas emissions for the wellbeing of generations to come, and increasing the resilience of its community to current and future impacts that cannot be avoided. Local climate policies and actions must be increasingly ambitious to address years of inaction at the Federal level, and to complement and build upon recent State policies, to achieve emissions reductions and resilience improvements at the speed required by current climate science. Special care must be paid to ensuring that Bellevue's most vulnerable residents do not disproportionately bear the burden of climate impacts, and that all residents have equitable access to carbon-free energy and transportation systems.

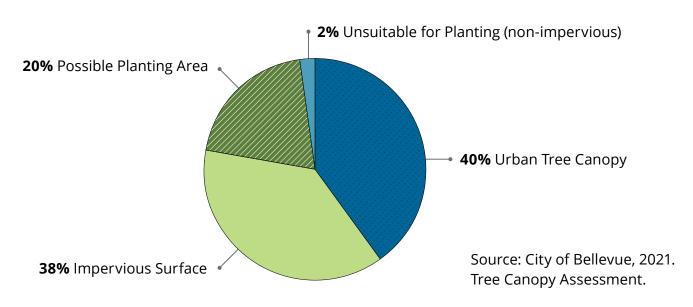
Bellevue can commit to being part of the vanguard of the global movement toward greener cities that foster biodiversity and develop in ways that reduce or eliminate greenhouse gas emissions, build community and ecosystem resilience and

TREE CANOPY

Bellevue's urban tree canopy provides habitat, stormwater management services, clean air, carbon capture and a buffer for urban noise and visual pollution. Beyond the trees themselves, vegetation and soils in natural areas reduce the velocity, temperature, and amount of water flow during storms. Additionally, tree canopy provides shade and can significantly lower the surface temperature of urban neighborhoods during extreme heat events linked to climate change. Development projects that result in tree loss compromise all these critical ecosystem services. The city has a goal of achieving a tree canopy that covers at least 40 percent of the city, which is consistent with the American Forests recommended goal of 40 percent tree canopy in urban areas. Despite city-wide declines in tree canopy through the 1980s and 1990s, Bellevue has steadily regained tree canopy in the last couple of decades.

result in net-positive changes in environmental conditions—all of which help to keep Bellevue a green, healthy and livable city into the future.

Figure CL-5. Bellevue Tree Canopy Coverage



Challenges and Opportunities

Alongside the opportunities presented by Bellevue's abundant natural resources and diverse ecosystems are challenges related to sustaining and stewarding Bellevue's natural environment for generations to come, particularly in an era of worsening climate change.

Bellevue faces the following challenges to its climate and environment in the coming decades:

- Impacts from worsening climate change, particularly in the form of extreme heat, extreme precipitation and flooding; drought; changes to stream temperature and snowpack; aquatic habitat degradation from flash flooding; and wildfire and wildfire smoke.
- Threats to the resilience of Bellevue's various sectors from climate impacts, including: buildings and energy systems, cultural resources and practices, economic development, ecosystems, emergency management and response, human health, land use and development, transportation and infrastructure, utilities (including solid waste, wastewater, and stormwater management) and water resources.
- Increased vulnerability of historically marginalized groups to climate impacts as a result of social inequity that lowers adaptive capacity of communities, including Black, Indigenous and People of Color communities, communities of recent immigrants, low-income households and households who do not speak English. Other groups, including children, older adults and people with disabilities, may also be more vulnerable to climate impacts due to underlying health conditions that lower adaptive capacity.
- Potential for degradation of environmentally sensitive (critical) areas and wetlands from worsening climate change, presenting further threats to the habitat of culturally and historically important species, including salmon.

PROTECTING CRITICAL HABITAT

Bellevue's natural environment contains critical terrestrial and aquatic habitat, supporting culturally significant species like salmon, western red cedar and American black bear. The city has a strong history of protecting habitat for a variety of species.

The city also plans for the future of its urban forest and its watersheds by utilizing climate resilient species that are adapted to tolerate drought and extremes in heat and precipitation. Protecting water sources from pollution and maintaining high levels of water quality can help aquatic ecosystems withstand climate impacts and increase resiliency.

The Growth Management Act requires cities and counties to adopt regulations for the protection of environmentally critical areas, which include wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, areas of frequent flooding and geologically hazardous areas. Critical areas may not be suitable for development, either because they are environmentally sensitive or it is not safe to build near them.

The Kelsey Creek Basin is the primary Chinook salmon stream in Bellevue. Chinook salmon, in addition to being culturally significant, are a listed species under the Endangered Species Act (ESA), which extends protections to critical habitat as well as individuals of the species. Other migratory corridors and habitat for salmonid species include Coal Creek, Lake Washington and Lake Sammamish. Bellevue's salmon, along with regional populations, face increasing stress from climate impacts to stream temperature, toxic pollution and sediment load. Bellevue coordinates its regulatory responsibilities with regional salmon recovery planning efforts.

- Geologic hazards, and the potential for a magnitude 7.0 to 7.5 earthquake along the Seattle Fault, a thrust fault zone two-tofour miles wide that runs parallel to I-90 in Bellevue. Seismic activity could have secondary impacts, including infrastructure damage and soil liquefaction.
- Potential threats to Bellevue's tree canopy amidst ongoing growth and accelerating climate impacts, particularly to certain species adapted to a colder climate.
- Impacts to electrical grid resilience due to increased demand from building and transportation electrification and extreme weather events.

In spite of these challenges, Bellevue has robust policies to foster sustainable growth and development, climate resilience, ambitious greenhouse gas emissions reductions, and a healthy human and natural environment. In response to the challenges Bellevue faces with regard to climate and environment, the city also seeks to embrace the opportunity to create a thriving and sustainable future. In addition, many policy objectives aimed at improving livability in Bellevue, such as transit-oriented development, multi-modal transportation investments, and middle housing can also support the achievement of Bellevue's climate and sustainability goals and increase resilience to climate change.

In the coming decades, Bellevue can:

- Grow and develop sustainably, halting and, when possible, repairing the negative impacts of previous growth patterns and development practices.
- Foster equity alongside climate resilience, ensuring that all residents are prepared for a resilient climate future, and reducing disparities in climate vulnerability for Bellevue's historically marginalized communities.
- Assume regional and national leadership in climate and sustainability through setting and achieving ambitious climate targets, pioneering

BELLEVUE'S COMMITMENT TO BUILDING GREEN

Bellevue has demonstrated its commitment to sustainable development through a number of recent building projects. The Mercer Slough Environmental Education Center (MSEEC) was designed and built to have minimal impact on the environment. Special gutters, porous concrete, and catchment ponds slow and filter water runoff at the site. Green roofs at the site reduce impermeable surfaces and warming around buildings. Renewable, recycled, local materials, along with sustainably harvested wood, were used in the construction of the buildings. In 2009, the city received a Gold LEED (Leadership in Energy and Environmental Design) rating for the MSEEC.

Since then, Bellevue has built or retrofit a number of its facilities to achieve LEED or other green building and energy efficiency standards, including Parks facilities, fire stations and City Hall.

sustainable practices and spearheading regional environmental partnerships and collaboration.

- Reduce vehicle miles traveled for every resident and continue to uphold Bellevue's character as a "City in a Park" through advanced public transit access and robust bicycle and pedestrian networks.
- Maintain, enhance, protect and steward Bellevue's natural environment for the benefit of its residents and ecosystems for generations to come, ensuing that Bellevue's unique and precious natural systems continue to contribute to the city as a place to live, work and recreate.

CLIMATE AND ENVIRONMENT POLICY SUMMARY

Bellevue's policies establish clear guidance for the city's actions, regulations and decision-making around climate change and environmental stewardship. The Climate and Environment policies are organized into the following 12 subsections:

Environmental Stewardship

Bellevue's Environmental Stewardship policies provide a citywide framework to protect and enhance the environment at a local, regional and global scale. These policies define the various approaches to conserve, steward and sustainably use air, water, land and energy resources over generations. Successful environmental stewardship will help ensure Bellevue is fulfilling its role in minimizing the city's climate impacts while fostering community values for environmental protection.

Greenhouse Gas Emission Reduction

Greenhouse Gas (GHG) Emission Reduction policies establish broad strategies to decrease citywide emissions and transition to clean and renewable energy sources. These policies will support programs and regulations that reduce GHG emissions at the speed and scale required by current climate science, which will result in the secondary benefit of improved air quality and climate resilience. New electric transportation technologies, coupled with mobility strategies such as mass transit, pedestrian/bike infrastructure and transit-oriented development, which are elaborated upon in the Transportation element, will help the community reduce the significant greenhouse gas emissions associated with today's transportation infrastructure.

Urban Forestry

Urban Forestry policies provide a framework to protect the city's trees, reach community canopy goals and maintain Bellevue's "City in the Park" character. These policies support tree canopy co-benefits of local and regional air and water quality, biodiversity and habitat conservation, climate mitigation and public health. Additionally,

these policies address the need for robust tree canopy protection and preservation as the city continues to grow and native tree species face increasing stress as a result of climate impacts. The Urban Forestry policies recognize the important environmental justice role tree canopy plays in mitigating the urban heat island effect, which disproportionately impacts low-income and BIPOC communities.

Climate Resiliency

Climate Resiliency policies seek to prepare Bellevue for projected climate impacts. These policies support local programs and regulations addressing the city's climate vulnerabilities, particularly to historically marginalized populations, and prepare the city to respond to environmental changes or natural disasters caused by climate change. The policies address intersecting climate vulnerability across many of Bellevue's sectors, including stormwater management, grid reliability and long-range planning and capital projects.

Waste and Materials Management

Waste and Materials Management policies promote sustainable waste management practices. The policies support community goals to achieve zero-waste and prioritize environmentally-friendly products. Responsible waste and materials management contributes to Bellevue's goals to reduce climate and environmental impacts. Policies address zero-waste practices at a municipal level and across the Bellevue community, including waste produced by residents, businesses and waste haulers.

Water Resources

Water Resources policies aim to protect or improve local water quality and support regional watershed health. The city's water resources provide drinking water, recreational opportunities and aquatic habitat for native species. These policies promote strategies to reduce or eliminate pollution sources, improve stream and watershed functions, and protect or improve the community's aquatic habitats. The policies are designed to address the sources of point pollution and promote the health of entire basins and

watersheds, recognizing the interconnectedness of water resources at a local and regional scale. These policies cover the broad nature of water resources, managing the health and sustainable use of the city's aquatic habitat, groundwater, surface water and drinking water.

Geologic Hazards

Geologic Hazards policies are intended to protect geologic resources and mitigate risks associated with geologically hazardous areas. These policies promote strategies to manage development in geologic hazard areas in a manner that protects residents, community assets and natural resources. Geologically hazardous areas generally include steep slopes, unstable land or soils and other areas that are vulnerable to geologic risks such as erosion, liquefaction or subsidence.

Sustainable Development

Sustainable Development policies encourage Bellevue to develop in a manner that minimizes the environmental impacts of development and strives towards a net environmental benefit from new buildings and infrastructure. These policies promote a range of development approaches and practices, based on scientific standards, that promote sensitive site development and emphasize water savings, energy efficiency, sustainable materials and indoor environmental quality. Sustainable development integrates nature-based solutions and mitigates the climate and environmental impacts historically associated with unsustainable urbanization patterns and practices. Successful implementation of these policies will reduce greenhouse gas emissions and address climate impacts, improve water quality and watershed health and enhance Bellevue's livability.

Air Quality

In the Puget Sound region, emissions from internal combustion engine vehicles are the primary source of air pollution. Other sources include industrial operations, indoor and outdoor burning and wildfire smoke. Air Quality policies aimed at reducing these sources improve community wide public health while simultaneously

supporting the city's climate goals by reducing greenhouse gas emissions.

Fish and Wildlife Habitat

Fish and Wildlife Habitat policies promote habitat preservation, enhancement and restoration for local and regional plant and animal species. These policies prioritize conservation and development practices that avoid or mitigate impacts to the various types of fish and wildlife habitat in Bellevue. The city's fish and wildlife policies are also intended to meet regional and state habitat conservation and management goals to support healthy, resilient and adaptive species communities.

Critical Areas

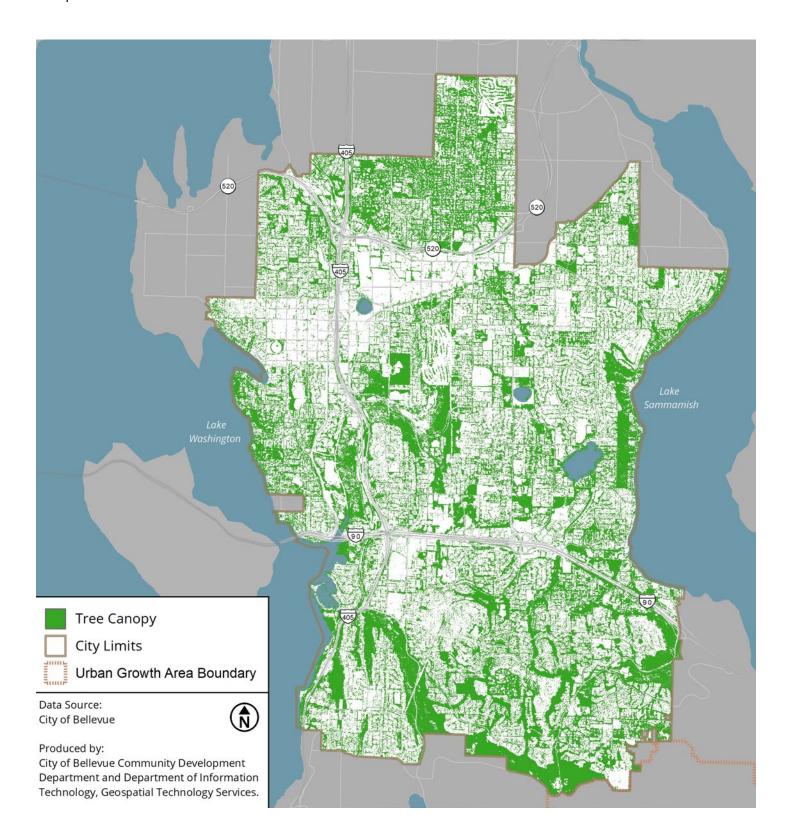
Bellevue's critical areas provide valuable habitat, protect and enhance water quality, facilitate stormwater conveyance, enhance local aesthetics and offer recreation, cultural resources and education opportunities. Bellevue protects these functions and values through the use of a Critical Areas land use designation, which establishes a regulatory framework for critical areas and their buffers. Land use regulations applicable to development within Critical Areas are intended to guide development in a manner that preserves and enhances critical area functions and values.

Noise

Excessive noise is a form of pollution that has direct and harmful effects upon the public's health and welfare and adversely affects the livability, peace and comfort of neighborhoods and the city as a whole. Noise, like many forms of pollution, is both a local and a regional problem. The city's noise control regulations are based on Comprehensive Plan policies to manage and reduce noise, with a particular focus on traffic and other transportation sources. The Transportation element contains additional policies relating to traffic noise. Noise is expected to be higher near major roadways, heavy industry and dense commercial areas. Therefore, policies support stronger noise protection and mitigation for residential neighborhoods and wildlife.

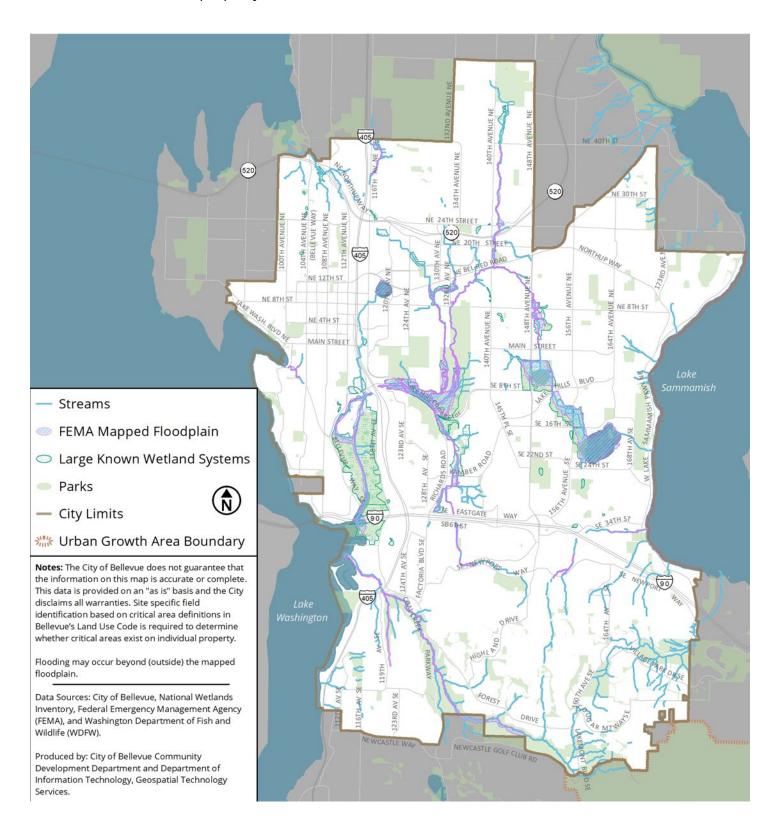
Map CL-1. Tree Canopy

The tree canopy in Bellevue is measured based on imagery from the USDA's National Agriculture Imagery Program (NAIP). The methodology is periodically updated to provide accurate estimates that are comparable across time.



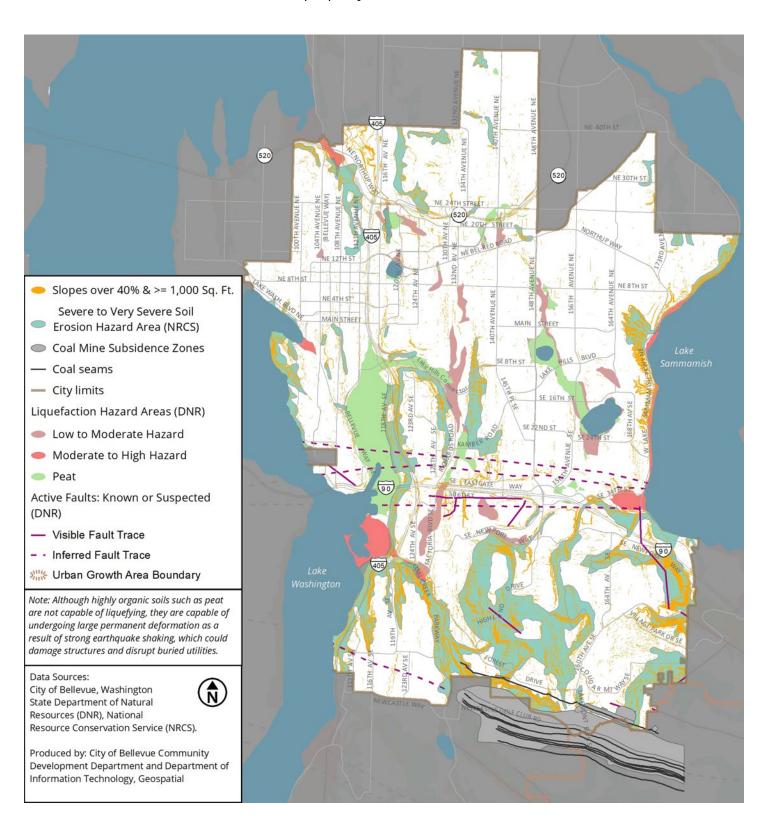
Map CL-2. Critical Areas Overlay — Streams, Wetlands and Floodplains

This map is a graphic representation of known streams, wetlands, FEMA mapped floodplains and fish and wildlife habitat areas within Bellevue. Site-specific analysis is required to determine whether critical areas exist on individual property.



Map CL-3. Critical Areas Overlay — Geologic Hazards

This map is a graphic representation of known earthquake fault lines, liquefaction zones, soil erosion hazards, steep slopes and coal hazards within Bellevue. Site-specific analysis is required to determine whether critical areas exist on individual property.



GOAL & POLICIES

Goal

Ensure that planning efforts, infrastructure investments and municipal operations proactively manage natural resources to meet the needs of current and future generations while maintaining the integrity, stability and beauty of natural systems.

Policies

Environmental Stewardship

- **CL-1.** Conduct city operations in a manner that support of the achievement of Bellevue's Environmental Stewardship goals and ensures the sustainable use of natural resources, promotes an environmentally safe workplace for its employees minimizes adverse environmental impacts and respects tribal sovereign and inherent rights.
- **CL-2.** Eliminate the release of substances into the air, water and soil that may have harmful impacts on people, wildlife or the environment. If total elimination is not practical, minimize to the greatest extent feasible.
- **CL-3.** Promote and invest in energy efficiency and renewable energy resources as an alternative to non-renewable resources.
- **CL-4.** Protect air, water, land and energy resources consistent with Bellevue's role in the regional growth strategy.
- **CL-5.** Provide regional leadership on sustainable development, climate resilience and greenhouse gas emissions reduction that extend beyond Bellevue's boundaries and require regional cooperation.
- **CL-6.** Provide the public with educational opportunities and resources about environmental issues and illustrate individual actions that benefit the environment.
- **CL-7.** Acknowledge ancestral tribal lands as part of environmental education.
- **CL-8.** Use life cycle cost analysis that includes a social cost of carbon and best management practices in city procurement, projects and budgeting process as essential components of effective environmental stewardship and long-term fiscal responsibility.
- **CL-9.** Support partnerships between the city, private landowners and regional tribes to steward private lands and ancestral lands, streams, habitat and other natural resources for the benefit of all.
- **CL-10.** Consider equitable impacts and historic health and environmental disparities when planning land use and capital projects, using recognized local, state or federal environmental justice tools.
- **CL-11.** Incorporate environmental education, interpretation and ancestral land acknowledgment into public and private projects, where appropriate.

Greenhouse Gas Emission Reduction

- **CL-12.** Accelerate the transition to all-electric buildings to improve public health and safety, increase climate resilience, reduce greenhouse gas emissions and protect building owners and tenants from the future costs of removing or retrofitting obsolete fossil fuel infrastructure.
- **CL-13.** Adopt and implement policies and programs to achieve a target of reducing citywide greenhouse gas emissions, compared to a 2011 baseline, by:
 - 50% by 2030,
 - 75% by 2040, and
 - 95% by 2050 and net-zero emissions through carbon sequestration and other strategies.

Evaluate and update these targets over time in consideration of the latest international climate science and best practices.

- **CL-14.** Consider climate change impacts and limit new greenhouse gas emissions when planning for new growth, while supporting emissions reductions from existing uses.
- **CL-15.** Lead by example by reducing greenhouse gas emissions resulting from city operations by amounts equal to or greater than citywide goals.

See also Capital Facilities policies related to high performance facilities, CF-15 to CF-24.

Urban Forestry

- **CL-16.** Achieve a citywide tree canopy target of at least 40% canopy coverage that reflects our "City in a Park" character and maintain an action plan for meeting the target across multiple land use types including right-of-way, public lands, and residential and commercial uses.
- **CL-17.** Minimize the loss of tree canopy, biodiversity and natural areas as a result of transportation and infrastructure projects, and mitigate for losses where impacts are unavoidable.
- **CL-18.** Strive to minimize loss of tree canopy from development and mitigate unavoidable tree removal.
- **CL-19.** Protect trees during development to ensure survivability and health of trees on sites undergoing development.
- **CL-20.** Protect Culturally Modified Trees on both public and private lands, in partnership and consultation with regional tribes.
- **CL-21.** Preserve the significant trees throughout the city to help maintain biodiversity and urban forest health.
- **CL-22.** Create optimal soil conditions for street tree plantings as specified in the city's Environmental Best Management Practices and Design Standards Manual to nurture a large tree canopy and build resilience to extreme heat and precipitation events.

- **CL-23.** Consider the long-term impacts of climate for managing the health of the urban forest.
- **CL-24.** Strive to increase tree canopy in neighborhoods with lower tree canopy or higher urban heat island effect, using an equity lens.

Climate Resiliency

- **CL-25.** Evaluate climate vulnerabilities as part of long-range planning efforts and capital projects. Develop and implement climate change adaptation strategies that create a more resilient community by addressing the impacts of climate change to public health and safety, the economy, public and private infrastructure, water resources, and habitat.
- **CL-26.** Advocate for increased grid reliability through state and utility regulatory rulemaking and legislation that supports demand response, storage and other clean technologies that reduce peak load, improve grid flexibility and support rapid electrification of buildings and vehicles.
- **CL-27.** Ensure that stormwater design standards account for future climate change impacts such as extreme precipitation events, and recharge groundwater where feasible, in accordance with Best Available Science.

See also Utilities policies related to storm and surface water, UT-34 to UT-44.

Waste and Materials Management

- **CL-28.** Achieve zero-waste community-wide in accordance with the Environmental Stewardship Plan.
- **CL-29.** Prioritize the use of sustainable, healthy products that are recyclable and made from recycled materials, or have other environmental attributes throughout their lifecycle. Support circular economy programs and products.
- **CL-30.** Engage in Environmentally Preferable Purchasing practices and support extended producer responsibility to reduce waste to landfill and carbon emissions.
- **CL-31.** Work with residents, businesses and waste haulers to continue to improve percentage of waste diverted from landfill.
- **CL-32.** Increase the landfill diversion rate of construction and demolition waste through reuse and recycling, from both city and private projects.
- **CL-33.** Ensure new commercial and multi-family buildings provide sufficient space for three separate waste streams: landfill-bound waste, recycling and organics.

Water Resources

CL-34. Integrate site-specific development standards with urban watershed-scale approaches to managing and protecting the functions of critical areas to enhance habitat, water quality and other ecosystem services, including the protection of watersheds and wellhead areas that are sources of drinking water supplies.

- **CL-35.** Retain existing open surface water systems in a natural state and restore conditions that have become degraded.
- **CL-36.** Maintain surface water quality, defined as meeting federal and state standards and restore surface water that has become degraded, to the maximum extent practicable.
- **CL-37.** Monitor surface water quality and implement measures to identify and address the sources of contamination.
- **CL-38.** Employ the best management practices and technology, education and enforcement strategies to minimize non-point source pollution.
- **CL-39.** Retrofit public storm drainage systems and prioritize investments where there is a significant potential for restoring surface water quality important to preserving or enhancing aquatic life.

See also Utilities policies related to storm and surface water, UT-34 to UT-38.

- **CL-40.** Reduce runoff from streets, parking lots and other impervious surfaces and improve surface water quality by utilizing low impact development techniques in new development and redevelopment.
- **CL-41.** Restore and protect the biological health and diversity of the Lake Washington and Lake Sammamish basins in Bellevue's jurisdiction.
- **CL-42.** Manage water runoff for new development and redevelopment to meet water quality objectives, consistent with state law.
- **CL-43.** Allow existing farming and agriculture in wetlands and in the 100-year floodplain so long as water quality and buffer functions are not substantially impacted.

Geologic Hazards

- **CL-44.** Allow land alteration and vegetation removal only for approved development proposals.
- **CL-45.** Regulate land use and development to protect natural topographic, geologic, vegetational and hydrological features.
- **CL-46.** Protect geologically hazardous areas, especially forested steep slopes, recognizing that these areas provide multiple critical areas functions.
- **CL-47.** Maintain updated geologic maps of the city, in conjunction with updates to regional geologic mapping efforts and other significant changes.
- **CL-48.** Maintain current geotechnical information related to landslides and erosion problems in the city's Geographic Information System.
- **CL-49.** Promote soil stability and the use of the natural drainage system by retaining and enhancing critical areas of existing native vegetation.

- **CL-50.** Prohibit development on unstable land and restrict development on potentially unstable land to ensure public safety and conformity with natural constraints.
- **CL-51.** Require an analysis of soil liquefaction potential where appropriate, in the siting and design of structures and infrastructure.
- **CL-52.** Use geotechnical information and an analysis of critical areas functions and values to evaluate the geologic and environmental risks of potential development on geologically hazardous areas and implement appropriate controls on development.
- **CL-53.** Utilize Best Available Science to ensure development is a safe distance from geologically hazardous areas to protect public safety.
- **CL-54.** Use specific criteria in decisions to exempt specific small, isolated or artificially created steep slopes from critical areas designation.
- **CL-55.** Minimize and control soil erosion during and after development through the use of best management practices and other development restrictions.
- **CL-56.** Provide information to the public about potential geologic hazards, including site development and building techniques and disaster preparedness.
- **CL-57.** Regulate development in coal mine hazard areas by requiring that a project proponent (with review, oversight and approval by the city):
 - Conservatively evaluate risks.
 - Eliminate the potential for catastrophic effects and keep development out of catastrophic risk areas.
 - Mitigate any non-catastrophic impacts.
 - Protect ratepayers from costs associated with development in areas potentially impacted by mining.
 - Provide disclosure mechanisms to inform property purchasers of past mining activities.
- **CL-58.** Consider climate change impacts, such as increased frequency and severity of storms, in planning and adjusting requirements related to geologic hazards and critical areas, in accordance with Best Available Science.

Sustainable Development

- **CL-59.** Maintain land use regulations that limit the amount of impervious surface area in new development and redevelopment city-wide.
- **CL-60.** Provide land use incentives to minimize the amount of impervious surface area below that allowed through prescriptive standards, in new development, redevelopment, and existing development citywide.
- **CL-61.** Implement the city-wide use of low impact development techniques and green building practices.

See also Utilities policies related to storm and surface water, UT-34 to UT-38.

- **CL-62.** Encourage shared multi-building or district-scale green stormwater infrastructure solutions in situations where on-site approaches are determined infeasible.
- **CL-63.** Make low impact development the preferred and commonly-used approach to site development to minimize impervious surfaces, native vegetation loss and stormwater runoff.
- **CL-64.** Provide education and incentives to support the implementation of low impact development practices, integrated site planning and green building, with a focus on early consideration of these in the site development process.
- **CL-65.** Support the use of emerging best practices in the area of green building and site design, including climate resilience measures, through the use of pilot programs and model ordinances.
- **CL-66.** Support sustainable and resilient net-zero and net-positive new development by phasing out fossil fuels and promoting renewable energy, energy efficiency, transportation and building electrification and electric grid integration.
- **CL-67.** Support energy efficiency retrofits and electrification in affordable housing properties, through incentives, financing, assistance and other strategies.
- **CL-68.** Encourage the use of low-carbon materials and building design principles that reduce greenhouse gas emissions in all parts of the project life cycle.
- **CL-69.** Support opportunities for district energy and incorporate district-level sustainability features in growing areas.

Air Quality

- **CL-70.** Support federal, state and regional policies intended to combat climate change and protect clean air in Bellevue and the Puget Sound Basin.
- **CL-71.** Work with the private sector to reduce growth in vehicle trips as a key strategy for reducing automobile-related air pollution.
- **CL-72.** Implement projects that provide significant air quality improvements to areas with existing poor air quality.
- **CL-73.** Provide transportation improvements for the purpose of relieving localized substandard air quality by shifting traffic from the most polluted areas to less congested facilities nearby, balancing other community needs such as equitable traffic or noise impacts.
- **CL-74.** Electrify the city's light-duty fleet, and promote the electrification and use of ultra-low or zero-emissions fuels for the city's medium and heavy-duty vehicles.
- **CL-75.** Maintain the ban on outdoor burning within the urban area and encourage the composting of leaves and other yard debris and other actions as alternatives to burning.
- **CL-76.** Reduce the amount of air-borne particulates through a street sweeping program, dust abatement on construction sites and other methods to reduce the sources of dust.

Fish and Wildlife Habitat

- **CL-77.** Provide incentives to private property owners to achieve specific habitat improvement goals, including retention and enhancement of native vegetation.
- **CL-78.** Encourage property owners to incorporate suitable indigenous plants in critical areas and buffers, consistent with the site's habitat type and successional stage, and considering species' climate resilience.
- **CL-79.** Anticipate and plan for increased demand in access to green and natural areas, including critical areas, in ways that protect the health and ecological function of those areas for future generations.

See also Parks, Recreation & Open Space policies related to the provision of parks and open space, PA-2 to PA-4.

- **CL-80.** Identify, prioritize and implement public projects to improve habitat.
- **CL-81.** Preserve and maintain the 100-year floodplain in a natural and undeveloped state, and restore conditions that have become degraded.
- **CL-82.** Protect, restore and maintain shoreline, wetland and riparian habitats to reduce erosion, provide shade, protect water quality, provide habitat for fish and wildlife and restore similar areas that have become degraded and improve the resilience of streams and aquatic species to climate change.
- **CL-83.** Stabilize stream banks and shorelines if necessary by using bioengineering techniques except where hydrology, excessive cost, or other factors make this approach infeasible.
- **CL-84.** Give special consideration to conservation or protection measures necessary to preserve or enhance anadromous salmonids, recognizing that requirements will vary depending on the aquatic resources involved, including differing stream classification, and that additional efforts may be identified in the regional salmon recovery planning process.
- **CL-85.** Prohibit creating new fish passage barriers and remove existing artificial fish passage barriers in accordance with applicable state law.
- **CL-86.** Coordinate with WSDOT, King County and neighboring jurisdictions to plan and prioritize culvert upgrades to ensure fish passage barrier removal, adequate projected stormwater passage and continued climate-related adaptations to handle water passage into the future throughout Bellevue, especially where terrestrial species connectivity can be restored simultaneously.
- **CL-87.** Require and provide incentives for the opening of piped stream segments during redevelopment where scientific analysis demonstrates that substantial habitat function can be restored, and where the cost of restoration is not disproportionate to the community and environmental benefit.
- **CL-88.** Preserve and enhance native vegetation in Critical Area buffers and integrate suitable native plants in urban landscape development, considering species' climate resilience.

- **CL-89.** Improve wildlife habitat especially in patches and linkages by enhancing vegetation composition and structure and incorporating indigenous plant species compatible with the site.
- **CL-90.** Encourage the use of native and climate-adaptive plants in residential and commercial landscapes, considering species' climate resilience.
- **CL-91.** Develop and support additional habitat enhancement demonstration projects.
- **CL-92.** Protect wildlife corridors to minimize habitat fragmentation, especially along existing linkages and in patches of native habitat. Identify opportunities to expand habitat protection and improve habitat quality and connectivity using conservation area designations, buffers and open space corridors.
- **CL-93.** Utilize studies and management recommendations to protect important wildlife habitat characteristics on land that is not a designated critical area.
- **CL-94.** Manage fish and wildlife habitat conservation areas to protect overall habitat functions and values (food, water, cover, space), except where a "special status species" requires targeted habitat management.
- **CL-95.** Rely on federal, state, and county agencies to identify "special status" wildlife species, but allow for a process to identify species of local importance to Bellevue in consultation with tribes based on their sovereign and inherent rights to fish, hunt and gather in usual and accustomed areas..
- **CL-96.** Manage naturally occurring ponds to provide fish and wildlife habitat, promote good water quality, and control invasive aquatic plants.
- **CL-97.** Prioritize efforts to preserve or enhance fish and wildlife habitat through regulations and public investments in critical areas with largely intact functions and in degraded areas where there is a significant potential for restoring functions.
- **CL-98.** Recognize the important role Bellevue plays in recovering salmon populations by acting on the goals of the WRIA 8 Salmon Recovery Council, the Puget Sound Partnership Action Agenda, the Washington Salmon Coalition, and other related groups and collaborative salmon recovery documents.

Critical Areas

- **CL-99.** Use the best scientific information available in an adaptive management approach to preserve or enhance the functions and values of critical areas through regulations, programs, and incentives.
- **CL-100.** Use prescriptive development regulations for critical areas based on the type of critical area and the functions to be protected; and as an alternative to the prescriptive regulations, allow for a site specific or programmatic critical areas study to provide a science-based approach to development that will achieve an equal or better result for the critical area functions.

- **CL-101.** Recognize critical area function in preparing programs and land use regulations to protect critical areas and to mitigate the lost function due to unavoidable impacts.
- **CL-102.** Develop programs and regulations acknowledging that designated critical areas such as wetlands, shorelines, riparian corridors, floodplains and geologically hazardous areas provide multiple functions including fish and wildlife habitat.
- **CL-103.** Establish a target of no net loss of ecosystem composition, structure and function, especially in Priority Habitats and Critical Areas, and strive for net ecological gain to enhance biodiversity and climate resilience.
- **CL-104.** Use science-based mitigation for unavoidable adverse impacts to critical areas to protect overall critical areas function in the watershed.
- **CL-105.** Implement monitoring and adaptive management plans for critical areas mitigation projects to ensure that the intended functions are maintained or enhanced over time.
- **CL-106.** Facilitate the transfer of development potential away from critical areas and the clustering of development on the least sensitive portion of a site.
- **CL-107.** Reduce or eliminate regulatory barriers to protecting and enhancing critical areas.
- **CL-108.** Develop partnerships with land conservation organizations to acquire critical areas and buffers to protect and restore critical areas functions.
- **CL-109.** Explore opportunities for public acquisition and management of key critical areas of valuable natural and aesthetic resources, and fish and wildlife habitat sensitive to urbanization through a variety of land acquisition tools such as conservation easements and fee-simple purchase.
- **CL-110.** Allow for building footprint expansion options for existing single family structures in critical areas, protective buffers and setbacks only in a manner that does not degrade critical area functions.
- **CL-111.** Require mitigation proportional to any adverse environmental impacts from development or redevelopment in the Protection Zone.
- **CL-112.** Establish or use current best-practice methodology for assessing economic value of critical area ecosystem services and climate resilience services. Include ecosystem services valuation in planning and infrastructure projects, including to inform mitigation or loss of ecosystem services compensation.

Noise

- **CL-113.** Ensure that excessive noise does not impair the permitted land use activities in residential, commercial and industrial land use districts.
- **CL-114.** Protect residential neighborhoods from noise levels that interfere with sleep and repose through development standards and code enforcement.

- **CL-115.** Require a noise analysis for transportation projects in or near residential areas if existing or projected noise levels exceed city-adopted standards, and implement reasonable and effective noise mitigation measures when appropriate.
- **CL-116.** Monitor and mitigate freeway noise and air pollution in collaboration with the state and other partners, prioritizing areas that are the most burdened with noise and air quality impacts.

See also Land Use policies related to air quality, LU-45 and LU-46.

- **CL-117.** Require new residential development to include transportation noise abatement design and materials where necessary, including the preservation of vegetation, to minimize noise impacts from arterials and freeways.
- **CL-118.** Evaluate the benefits of measures designed to mitigate arterial noise, particularly noise walls, including co-benefits of air pollution mitigation, considering impacts on the pedestrian environment and neighborhood character.
- **CL-119.** Consider noise impacts when evaluating measures designed to keep traffic volumes and speeds within reasonable limits on collector arterials.