



Environment Element

Vision

The County's vision for the environment is the protection of natural resources and systems through education, land use planning, and coordinated efforts that assure the forests, clean air, and water that Kitsap is known for are sustained for the benefit of current and future generations.

Intent

The purpose of this chapter is to provide the goals, direction, and path for the future of sustaining natural environments in Kitsap County.

Kitsap County recognizes the importance of protecting the natural environment while providing for the needs of the growing number of residents and businesses that call this place home. Ecosystems such as forest lands, shorelines, freshwater systems, and other areas all make up the natural environment of Kitsap County. Human well-being depends on a healthy, natural environment to provide for clean air, clean water, food, and overall high quality of life. The quality and abundance of Kitsap County's natural environments are well documented and are what define Kitsap County as the "natural side of Puget Sound."

Since the 2016 Comprehensive Plan update, and with a keen eye on planning for the future, Kitsap County has placed a higher priority on environmental sustainability in public policy. A community that embraces sustainability must continually improve the relationship between the developed and natural environments. This includes managing the natural environment as an essential asset alongside other assets like roadways, buildings, and capital facilities. Like these other assets, the natural environment provides services and

economic benefits that require planning, coordination, monitoring, and supportive fiscal policies and strategies.

GMA Goals and Regional Coordination

The Growth Management Act (GMA) sets forth planning goals to guide the development of comprehensive plans. The following GMA planning goal directly addresses the environment: “Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.”

In developing comprehensive plans to implement this planning goal, the GMA does not require that a comprehensive plan have an environment chapter. However, the Washington State Department of Commerce’s guidelines for GMA implementation recommend that jurisdictions give “strong consideration” to including a chapter that addresses environmental protection, including protection of critical areas.

In addition to planning under GMA, Kitsap County plans in coordination with the other central Puget Sound region communities that make up the Puget Sound Regional Council. VISION 2050 is the most recent version of the region’s plan to provide an exceptional quality of life, opportunity for all, connected communities, a spectacular natural environment, and an innovative, thriving economy. Like earlier versions of the plan, Vision 2050 continues to focus on environmental stewardship, protection of farms and forests, and improving air quality. Further, VISION 2050 incorporates new policies and actions intended to more strongly support the recovery of Puget Sound, conservation of the regional open space network, and access to open space.

Relationship to Other Elements

The goals, policies, and strategies in the Environment Chapter are consistent with and may be implemented through the different elements of the Comprehensive Plan, including Land Use, Economic Development, Housing and Human Services, Transportation, Parks, Recreation, and Open Space, Capital Facilities and Utilities, and Climate Change.

Background

Kitsap County strives to treat its environment as an asset. Adjacent to Puget Sound and Hood Canal, the county includes 216 miles of marine shorelines. The county is part of Water Resource Inventory Area (WRIA) 15 and includes 1000 miles of streams, numerous wetlands, lakes, and estuaries. Kitsap County’s landscape is varied, with large areas of forested land cover including second and third growth trees.

Kitsap County protects the environment in many ways, including the following:

- Kitsap County protects the natural environment in part through its adopted Critical Areas Ordinance (CAO), Shoreline Master Program (SMP), and Stormwater Ordinance. Key elements of the natural environment in the County are regulated as critical areas, including geologically hazardous areas, critical aquifer recharge areas, wetlands, frequently flooded areas, and fish and wildlife habitat conservation areas. These elements are defined, mapped, and regulated in the CAO. Under the GMA, the goals and policies of the SMP are considered an element of the County’s Comprehensive Plan. In addition to adopted regulations, Kitsap County achieves measurable environmental results in protecting and restoring ecological functions and values, including ensuring adequate consideration of anadromous fisheries and recovery of endangered salmon stock.
- Kitsap County actively acquires lands for long-term open space and passive recreation including fish and wildlife habitat areas, wetlands, and shorelines. Kitsap has acquired over 4,000 acres of private timber land in the last 10 years; doubling its open space lands.

- In 2018, Kitsap County began working with the Washington Environmental Council, Port Gamble S'Klallam Tribe, and Suquamish Tribe to develop the natural asset management program. This new management program defines baseline levels of service or functional conditions of forest cover, streams, and shorelines and aims to develop goals or desired level of service for each asset. The desired levels of service will help guide investments and prioritization of actions to restore and protect natural systems. In addition, County staff continue to explore further implementation of the program into County planning.
- Kitsap County is an active participant in Puget Sound Partnership (PSP) ecosystem recovery efforts and is involved in identifying and prioritizing local actions to recover Puget Sound and its shellfish, habitat, and water quality.
- Kitsap County continues to carry out its programs under the “Water as a Resource” policy (Kitsap County Resolution 134-2016), which cooperatively addresses water as a resource, not a waste stream.
- Kitsap County’s programs that affect and address public water supply also work to provide for protection of the quality and quantity of groundwater.
- Kitsap County works with area Tribes, agencies, and other groups to protect important natural environments prioritized by tribal treaty rights.
- Kitsap County works with incorporated cities and neighboring counties to plan and implement actions that restore and protect the health of watersheds that cross jurisdictional boundaries.

A growing array of tools and strategies exist to help Kitsap County with sustainable development, as well as for environmental protection and restoration. Other tools, strategies, and practices are needed, especially related to integrating natural features into the built environments and to address the impacts of climate change.

Key Terms

Asset management refers to treating the components of the public infrastructure system as assets within the public trust to be stewarded by the local government.

Kitsap Natural Resource Asset Management Program (KNRAMP) is a new framework to manage natural assets (such as forests, streams, and shorelines) using the same asset management and capital improvements principles that municipalities use to manage built infrastructure. The Program provides a mechanism to incorporate nature-based solutions and green infrastructure practices into traditional infrastructure planning and uses ecosystem services principles to quantify the “level of service” (LOS) provided by natural resources, using the same terminology as public works for prioritizing investments in grey infrastructure.

Levels of service are measures of the condition and performance of the asset in relation to the expected service. The Kitsap Natural Resource Asset Management Program defines the levels of service provided by streams, forests, and marine shorelines. Methodologies used for calculating Level of Service are based on best available science, per RCW 36.70A.172, and may require revision over time as additional or improved data become available.

Life-cycle cost analysis is used to determine the total cost of a project or activity over its lifetime. It includes the cost of planning, design, construction or start-up, and the costs to operate, maintain, and eventually dissolve or dispose.

Cost-benefit analysis considers costs as well as environmental, social, and public health outcomes of alternative approaches. It is a more complete basis for comprehensive decision making.

Low Impact Development is a stormwater and land-use management strategy that tries to mimic natural hydrologic conditions using practices such as bio-retention, rain gardens, permeable pavements, minimal excavation foundations, vegetated roofs, and rainwater harvesting.

Best Available Science Under the state Growth Management Act (GMA), local governments are required to use the best available science in their policies and regulations on critical areas. Best available science means current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by the Washington Administrative Code.

No Net Loss is a standard that ensures new developments do not introduce new impacts that decrease ecological functions. If impacts do occur, projects must mitigate those impacts to demonstrate no net loss.

Environment Goals, Policies and Strategies

Environment Goal 1. Ecosystems and Habitat

Protect and enhance the health, resilience, functions, and processes of natural environments and ecosystems, including forest lands, shorelines, freshwater systems, and critical areas to ensure functioning ecosystem services and fish and wildlife habitat are sustained into the future.

Environment Policy 1.1. Manage development to protect habitats and ecological processes.

Environment Policy 1.2. Consider the functions and processes of the natural environment in project planning and review.

Environment Policy 1.3. Protect and restore marine shorelines, riparian areas, wetlands, floodplains, and estuaries.

Environment Policy 1.4. Preserve and restore the functions of natural habitat to support ESA-listed species.

Environment Policy 1.5. Enhance urban tree canopy and promote benefits of urban forests as it relates to a healthy environment, climate change, stormwater, and community livability.

Environment Strategy 1.a. Direct population growth into walkable, transit-oriented urban growth areas (UGAs) with easy access to natural space.

Environment Strategy 1.b. Coordinate an improved development planning and review system that maintains the functional values of the natural environment while meeting Growth Management Act requirements for land use, capital facilities, housing, and economic development.

Environment Strategy 1.c. Provide incentive-based, non-regulatory programs for the protection of the natural environment such as acquisition of important habitats through fee-simple and conservation easements from willing sellers. Institutionalize the Shore Friendly Kitsap Program which provides technical assistance for residential property owners to motivate voluntary actions for healthy shorelines.

Environment Strategy 1.d. Use the Kitsap Natural Resource Asset Management Program and other planning mechanisms to assess the potential impacts of higher intensity land uses and development in ecologically sensitive and critical areas.

Environment Strategy 1.e. Seek funding opportunities to protect and restore natural systems.

Environment Strategy 1.f. Develop development standards or programs that protect tree canopy in urban and rural areas.

Environment Strategy 1.g. Convene experts to strategize on prioritization, funding, and regulatory and non-regulatory incentives to acquiring, restoring, and managing public lands for conservation purposes.

Environment Strategy 1.h. Support and incentivize protection of habitats and ecosystems, their functions, and the processes that form and maintain them with the Conservation Futures Tax Program.

Environment Strategy 1.i. Submit the required annual report to the Federal Emergency Management Agency regarding Kitsap County's status on review of projects for compliance with the National Flood Insurance Program (NFIP) Biological Opinion Puget Sound, as well as progress towards achieving programmatic compliance.

Environment Strategy 1.j. Develop and adopt a salmon and ecosystem recovery plan for Kitsap County that guides funding and implementation of restoration and protection projects and programs using the Kitsap Natural Resource Asset Management Program and salmon and ecosystem recovery plans from Hood Canal Coordinating Council and West Sound Partners for Ecosystem Recovery.

Environment Strategy 1.k. Increase the number and accelerate implementation of habitat acquisition and restoration projects as prioritized in salmon and watershed recovery plans.

Environment Strategy 1.l. Encourage recolonization of beavers, promote a thriving beaver population, and reduce beaver-human conflicts by protecting and restoring suitable beaver habitat, relocating vulnerable infrastructure away from areas likely to be flooded by beavers, restricting removal and modification of beaver dams except in extreme circumstances, and providing public education about the benefits of beavers in recovering natural ecosystems.

Environment Strategy 1.m. Establish and implement a monitoring and evaluation program to determine the effectiveness of restoration, enhancement, and recovery strategies for ESA-listed and other species of tribal significance.

Environment Goal 2. Critical Areas

Designate and protect critical areas. Critical areas include wetlands, critical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.

Environment Policy 2.1. Use the best available science in developing policies and development regulations to protect the functions and values of critical areas.

Environment Policy 2.2. Give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries.

Environment Policy 2.3. Provide development regulations that protect all functions and values of critical areas to ensure no net loss of ecological functions and values.

Environment Policy 2.4. When considering expanding an urban growth area, avoid including lands that contain large amounts of mapped critical areas.

Environment Policy 2.5. When considering expanding an urban growth area, avoid including new areas within a 100-year flood plain unless no other alternatives exist.

Environment Strategy 2.a. Identify open space corridors within and between urban growth areas that include lands useful for the connection of critical areas.

Environment Strategy 2.b. Designate critical areas by using the best maps feasible and performance standards.

Environment Strategy 2.c. Review plan, regulation, and permit implementation monitoring results and, where applicable, incorporate adaptive management measures to ensure regulations are efficient and effective at protecting critical area functions and values.

Environment Strategy 2.d. Acknowledge the benefits of beavers to natural systems and water availability and explore designating beavers as Species of Local Importance in the Critical Areas Ordinance.

Environment Goal 3. Natural Resources as an Asset

Formally treat natural environments and ecosystems including forest lands, shorelines, freshwater systems, and critical areas as essential assets that are planned for, managed, and invested in to meet the needs of current and future generations.

Environment Policy 3.1. County Departments and the Board of County Commissioners cooperatively plan for, invest in, track progress, and adaptively manage the natural environment as an asset.

Environmental Policy 3.2. Define natural assets, develop levels of service for each asset, and improve the inventory of assets and their condition. Work with the community and decision makers to develop levels of service.

Environment Policy 3.3. Continuously improve mapping, inventory, and baseline information of natural assets and their condition.

Environment Policy 3.4. Promote the most efficient and effective use of public financial resources for County projects and programs related to the natural environment.

Environment Policy 3.5. Possible additional policy: Recognize that a healthy and vibrant environment is a foundation of strong social, community, health, and other positive outcomes.

Environment Strategy 3.a. Adopt and implement the Kitsap Natural Resource Asset Management Program as a mechanism to manage, plan for, and invest in Kitsap County’s natural environment as an essential asset. Other mechanisms may include, but are not limited to, plans, ordinances, resolutions, or official policy directives.

Environment Strategy 3.b. Assess whether amendments are warranted to relevant codes or programs to ensure that the natural environment is being managed as an essential asset.

Environment Strategy 3.c. Develop mechanisms in addition to the Kitsap Natural Resource Asset Management Program to identify, document, and evaluate how the natural environment is assessed in land use, transportation, stormwater utility, parks, and other County plans.

Environment Strategy 3.d. Develop a monitoring program to systematically produce annual reports on the quantitative changes to natural environments based on land cover changes, development projects constructed, types and sizes of mitigation, or other appropriate metrics and the net result for natural resources essential asset management.

Environment Strategy 3.e. Develop a framework to determine economic value of ecosystem including methods to identify, describe, and evaluate the quantifiable services provided by natural environments.

Environment Strategy 3.f. Use project analysis methods including, but not limited to, life-cycle cost analysis, cost-benefit analysis, and equity analysis to ensure efficient and effective use of public funds for environmental projects and programs when practicable.

Environment Goal 4. Collaboration and Partnerships

Coordinate natural environment management and recovery with internal and external partners.

Environment Policy 4.1. Collaborate across County programs and external agencies and organizations that supply data, analysis, and support for managing and restoring natural environments and resources.

Environment Policy 4.2. Provide regional leadership with cities, tribes, and County-wide programs to identify priority environmental issues that affect the Kitsap Peninsula.

Environment Strategy 4.a. Identify areas of joint interest among County programs, state agencies, tribes, conservation land trusts, state, and federal departments, including Defense, which may facilitate partnerships in data sharing, funding, and stewardship for the environment.

Environment Strategy 4.b. Coordinate the County’s goals and priorities on natural resources asset management planning with the Puget Sound Partnership, Puget Sound Regional Council, Kitsap Regional Coordinating Council, the West Sound and Hood Canal Lead Entities for Salmon

Recovery and Local Integrating Organizations, Tribes, and other regional coordinating bodies as appropriate.

Environment Strategy 4.c. Work across jurisdictions to identify, protect, and restore networks of natural habitat areas and functions that cross political boundaries.

Environment Strategy 4.d. Coordinate and share data with conservation land trusts and other community organizations to identify and preserve priority areas for environmental protection and preservation.

Environment Goal 5. Use Best Practices

Utilize best practices to protect people, property, and the natural environment.

Environment Policy 5.1. Use appropriate regulatory and incentive-based approaches in land use, transportation, and development engineering programs.

Environment Policy 5.2. Employ Best Management Practices to protect the long-term integrity of the natural environment, adjacent land uses, and the productivity of resource lands.

Environment Policy 5.3. Maintain and enhance long term quality and quantity of water resources.

Environment Policy 5.4. Reduce health impacts to vulnerable populations such as low-income communities, Black, Indigenous, and communities of color, people with disabilities, seniors, and communities that are disproportionately affected by noise, air pollution, or other environmental hazards.

Environment Strategy 5.a. Explore opportunities for mitigation banks and participate in mitigation programs.

Environment Strategy 5.b. Maintain a database of scientifically sound maps and data to provide optimal information during the development review process and planning efforts as well as information regarding barriers to fish passage and other inventory needs.

Environment Strategy 5.c. Ensure staff are trained on the use of emerging best practices in the area of sustainable land use practices, including green building and site design, and create awareness of these preferred practices through the use of pilot programs, model ordinances, education, and incentives, while in balance with other Growth Management Act required elements.

Environment Strategy 5.d. Identify and protect critical aquifer recharge areas and utilize Low Impact Development (LID) site planning principles to the greatest extent possible for reducing stormwater runoff.

Environment Strategy 5.e. Use stormwater Best Management Practices (BMPs) to reduce the amount of pollutants in runoff.

Environment Strategy 5.f. Develop and implement programs supporting the retrofit of surface and stormwater management infrastructure to more protective standards.

Environment Strategy 5.g. Coordinate land use planning using watersheds or natural drainage basins to implement restoration of aquatic habitat and reduce impacts to natural systems.

Environment Strategy 5.h. Provide public resources to identify parcels likely to be inhabited, colonized, or flooded by beavers. Consider incentivizing relocation of structures away from potential beaver habitat and areas likely to be flooded by beavers.

Environment Goal 6. Outreach and Education

The public is informed about opportunities for stewardship and engaged in dialogue regarding the management and protection of the natural environment.

Environment Policy 6.1. Educate County residents and businesses about the function and benefits of a healthy ecosystem.

Environment Policy 6.2. Recognize the vital connection between protection of the County's rural character, environmental essential assets, environmental benefits, and economic opportunities.

Environment Policy 6.3. Increase opportunities for public participation and community engagement regarding Kitsap County's environmental protections.

Environment Strategy 6.a. Support and incentivize voluntary stream, wetland, riparian, and shoreline restoration and preservation efforts.

Environment Strategy 6.b. Develop and implement education, outreach, and incentive programs to improve regulatory compliance.

References

- Shoreline Master Program:
<https://www.codepublishing.com/WA/KitsapCounty/#!/Kitsap22/Kitsap22.html#22>
- Critical Areas Ordinance:
<https://www.codepublishing.com/WA/KitsapCounty/#!/Kitsap19/Kitsap19.html>
- Water as a Resource:
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- Kitsap Natural Resource Asset Management:
<https://www.kitsapgov.com/dcd/Pages/KNRAMP.aspx>
- Kitsap County Climate Change:
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