Environment

***GOAL:** The region cares for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, and reducing air pollutants. The health of all residents and the economy is connected to the health of the environment. Planning at all levels considers the impacts of land use, development, and transportation on the ecosystem.*

Bainbridge Island

The natural environment is the foundation for the region's high quality of life and thriving economy. It provides critical services and goods such as clean water and air, flood protection, building materials, food, recreation, and health benefits. The region's quality of life and natural environment are considered top assets for retaining and recruiting a talented and skilled workforce.

Recognizing the importance of a healthy natural environment, the region is making significant investments to protect and restore habitat and ecological systems. Cities and tribes are restoring shorelines. Counties are providing long-term protection for farm and forest land. Property owners are installing green infrastructure to clean stormwater runoff. These environmental investments are the result of collaboration between many partners from the public, private, and nonprofit sectors.

However, impacts from current and legacy systems still exist. Habitat is still being lost from conversion of forests, and stormwater from transportation and land use still pollutes the region's water. Our sewage treatment facilities are in need of being upgraded to reduce the amount of nitrates and chemicals of emerging concern entering Puget Sound. As a result, threatened and endangered species such as salmon and orca, indicators of the health of Puget Sound, continue to decline. Public health in some areas in the region is impacted by environmental conditions such as proximity to major roadways, sewage spills from outdated and inadequate facilities, and lack of access to open space and healthy food. In all areas of planning, racial and social equity must be addressed to ensure healthy places and outcomes for all.

Many federal, state, and local government regulations protect the environment. The Growth Management Act requires that resource lands and critical areas be designated and protected by local governments using best available science (RCW 36.70A.170). Local governments regulate stormwater through compliance with permits issued by the Washington State Department of Ecology. To comply with air quality requirements of the federal and state Clean Air acts, local governments provide transportation choices.

Local governments also protect and restore the environment through non-regulatory actions such as providing open space for residents and incentivizing green building.

Land use, transportation, economic development, and human health are interconnected and therefore require integrated planning, regulations, and implementation actions. For example, the region's transit and trail systems can provide access to both jobs and to the region's open spaces, which support rural economies and the health of urban residents. Trees and vegetation provide habitat for pollinators, which in turn support the region's farm economy and food systems.

Although PSRC plays a limited and somewhat indirect role in funding for environmental issues and projects, PSRC does support local efforts to protect the environment by continuing to play a role in:

- Certifying comprehensive and subarea plans for local jurisdictions with consideration of how those plans impact the natural environment.
- Setting expectations for local comprehensive plans regarding stewardship of the natural environment, through the multicounty planning policies contained in VISION 2050.
- Approving funding grants to member jurisdictions for transportation projects.
- Collecting and sharing data, information, and innovative best practices.
- Addressing challenges and encouraging multi-benefit solutions by facilitating discussions with interested parties.
- Developing regional-scale environmental planning information and policies, such as the Regional Open Space Conservation Plan.

VISION 2050 takes a balanced and responsible approach to future development. As understanding of growth's impacts and the region's capacity changes, the region's plan should evolve to ensure it represents a responsible path for the region's long-range future.

Habitat, Open Space, and Environmental Stewardship

Conserving open space can help the region to achieve its goals for climate, habitat, air quality, park access, and Puget Sound recovery. Open space is a collective term for a range of green places, including natural lands, farmlands, working forests, aquatic systems, regional trails, and parks. Open space provides many services such as air, climate, and water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, ground water recharge and discharge, carbon sequestration, erosion control, and recreation. Open space in the region has been valued at $11.5 to $25.3 billion a year.

Marcela Gara, Resource Media

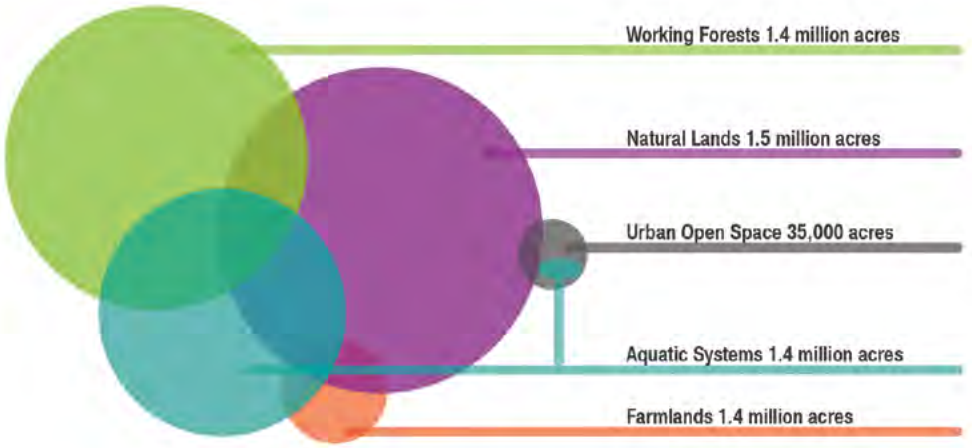
In 2018, PSRC completed the Regional Open Space Conservation Plan, which maps the network of regionally important open space in King, Kitsap, Pierce, and Snohomish counties and identifies priority actions needed to increase access and sustain open spaces for the long term. The regional open space network covers about 3 million acres of public and private land and 339 miles of trails.

While much of the region's important open space and critical areas have been protected through growth management and local plans, conservation needs remain. Between 2007 and 2012, the region lost almost 12,000 acres of farmland. A strong economy in the region is accelerating growth and development, which puts further pressure on the open space network. The open space plan identifies approximately 463,000 acres of the regional open space network that are most at risk, 47 areas with high-priority urban open space needs, and 300 miles of regional

Figure 17 – Value of Open Space Services in the Central Puget Sound Region

SERVICE	LOW	HIGH
Aesthetic	$2,293,975	$9,509,713
Air	$422,203	$529,187
Food	$12,587	$86,472
Shelter	$73,984	$111,407
Water	$62,605	$1,925,347
Health	$41,168	$50,352
Play	$2,633,343	$4,132,675
Disaster Mitigation	$1,860,499	$4,194,473
Raw Materials	$23,279	$155,093
Waste	$4,034,301	$4,568,983
TOTAL	$11,457,944	$25,263,700

Figure 18 – Regional Open Space Network Area by Category Including Overlap

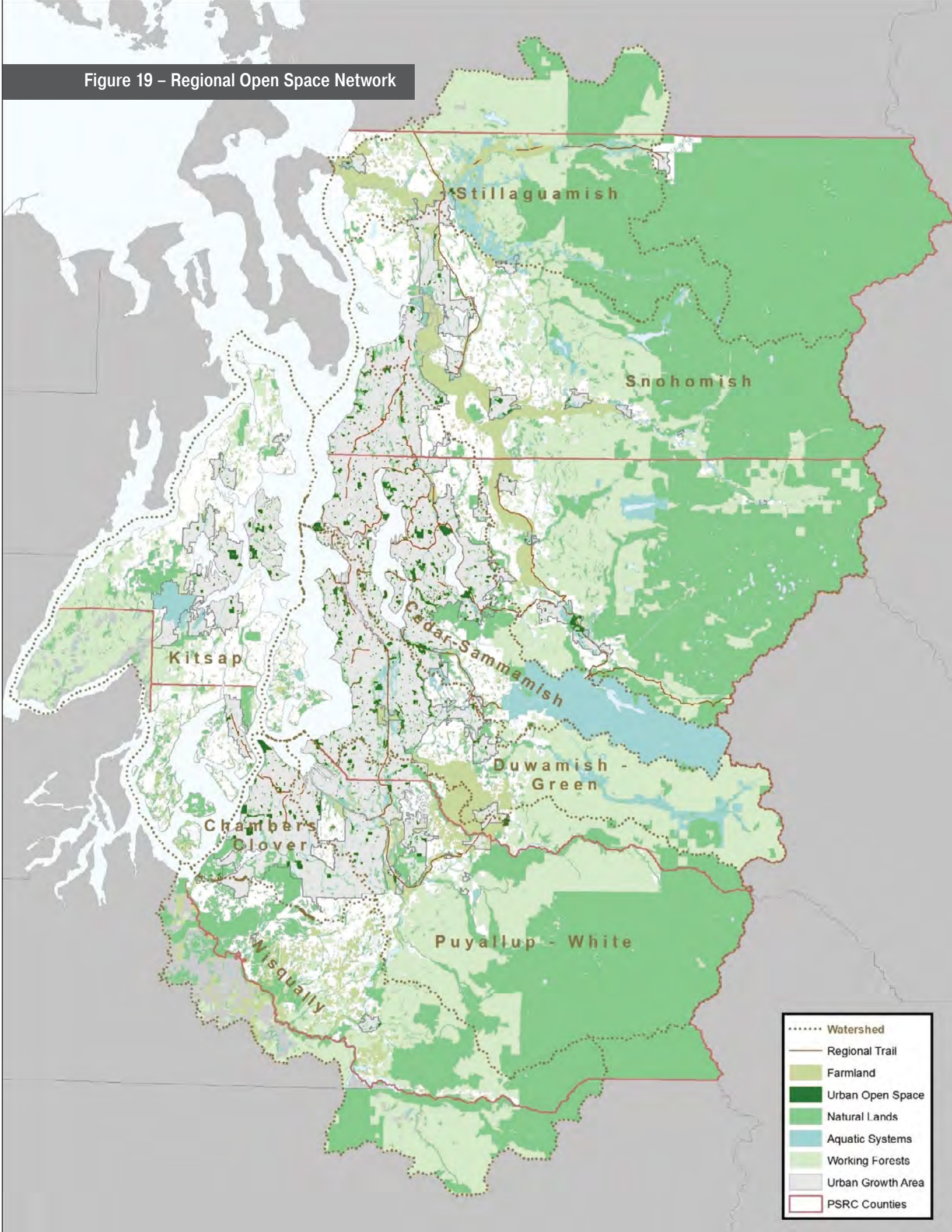


Mount Rainier National Park

trail needs. The open space plan also stresses the importance of environmental stewardship – the care of land, water, and air by individuals, communities, the private sector, and government agencies – in achieving the region's goals. Tribes in the region, the original stewards of the land, are being looked to for guidance on conserving open space and managing natural resources, from improving forest health with planned burns to increasing salmon populations through stream and floodplain restoration.

Recognizing that smaller-scale, yet important, open space land exists, the Growth Management Act requires that locally important open space and critical areas be identified and protected (RCW 36.70A.170). This has been accomplished in large part through local governments identifying critical areas and developing regulations to protect them. The Growth Management Act also directs local governments to identify lands that are useful for public purposes and to identify open space corridors within the urban growth area that are useful for recreation, wildlife habitat, trails, and connection of critical areas (RCW 36.70A.160). Further identification of local urban open space corridors is an important step in protecting these areas. Ongoing assessment and coordination of critical areas will also be beneficial.

Figure 19 – Regional Open Space Network



Puget Sound Recovery

Though beautiful from a distance, Puget Sound is in serious trouble and is in a steady state of decline. The region has made some progress towards restoring the health of Puget Sound, including its freshwater, estuary, nearshore, marine, and upland habitats, but significant work and challenges remain. With the steep decline of orca and salmon populations, the health of Puget Sound has become a more urgent issue over the last 10 years. These trends, as well as some positive trends for water quality, have been analyzed by the Puget Sound Partnership, the state agency tasked with coordinating Puget Sound recovery. In the Partnership's 2019 State of the Sound report, many indicators are showing improvement, but just as many indicators are not. Efforts must be re-doubled to combat climate change and the effects of a growing population that threaten ecosystems and disproportionately affect vulnerable communities.

Today, strategies that can help to recover the health of Puget Sound are better understood. Stormwater pollution and changes in the hydrology of runoff patterns are among the biggest threats to Puget Sound water quality. Contamination of aquifers, low stream flows and excess nutrients and pollutants from sources such as wastewater treatment plants, agriculture and lawn runoff, leaky septic tanks, and polluted stormwater are other concerns. This is a critical

Crystal Mountain

time in the recovery of Puget Sound's health; it will never be as achievable or affordable as it is today.

Local governments play a critical role in Puget Sound recovery through actions such as protecting and restoring critical habitat, converting hardened shorelines back to more natural conditions, protecting aquifers, promoting and installing stormwater infrastructure, and upgrading sewage treatment facilities. Beyond treating stormwater, green stormwater infrastructure, or low-impact development, can:

- Remove pollutants from stormwater before it reaches our aquifers and waterways
- Create mini-parks with trees and plants
- Prevent flooding and erosion damage
- Provide habitat for pollinators
- Improve air quality and provide shade
- Replenish groundwater by reducing runoff and increasing infiltration
- Contribute to health and wellness by adding more green space
- Calm traffic and create safer streets for walking and biking
- Increase sewer capacity and reliability

Most of the region is in watersheds that eventually drain to Puget Sound. A watershed consists of all the land and water that drains toward a water body. Watersheds don't follow jurisdictional boundaries and require active collaboration between local governments, tribes, military installations, agencies, and other organizations. Planning for watersheds includes watershed assessment, mapping, monitoring of conditions and trends in streams and lakes, water quality assessment, gathering other environmental information, and development of a watershed plan. The concept of watershed planning is continuing to expand to integrate land use, stormwater, parks and recreation, and transportation. Some jurisdictions have developed holistic watershed protection and restoration plans which have helped to inform comprehensive plans and capital facilities plans. Some examples of projects identified in these plans that help to restore Puget Sound health include conserving open space that recharges groundwater, building regional stormwater facilities that clean and absorb polluted runoff, and restoring streams and floodplains that improve habitat and hydrology.

Air Quality

Air pollution contributes to a variety of public health issues such as an increase in respiratory and cardiovascular diseases, heart attacks, cancer, and premature death. Climate change, a closely related issue, is discussed in the following chapter. Populations particularly sensitive to air pollution include youth, the elderly, and people with cardiovascular and lung diseases. People who have lower incomes also face risk from air pollution because they often lack access to healthcare and live near major roadways or other pollution sources.

Significant progress has been made in curbing air pollution over the last several decades. However, fine particles, air toxics, and ground-level ozone continue to be a concern, especially for communities close to highways and industrial areas. Air pollution also obscures many of the most scenic vistas, such as views of the Olympic and Cascade mountain ranges, including Mount Rainier.

Environment POLICIES

MPP-En-1
Develop and implement regionwide environmental strategies, coordinating among local jurisdictions, tribes, and countywide planning groups.

MPP-En-2
Use integrated and interdisciplinary approaches for environmental planning and assessment at regional, countywide, and local levels.

MPP-En-3
Maintain and, where possible, improve air and water quality, soils, and natural systems to ensure the health and well-being of people, animals, and plants. Reduce the impacts of transportation on air and water quality and climate change.

MPP-En-4
Ensure that all residents of the region, regardless of race, social, or economic status, have clean air, clean water, and other elements of a healthy environment.

MPP-En-5
Locate development in a manner that minimizes impacts to natural features. Promote the use of innovative environmentally sensitive development practices, including design, materials, construction, and on-going maintenance.

MPP-En-6
Use the best information available at all levels of planning, especially scientific information, when establishing and implementing environmental standards established by any level of government.

MPP-En-7
Reduce and mitigate noise and light pollution caused by transportation, industries, public facilities, and other sources.

MPP-En-8
Reduce impacts to vulnerable populations and areas that have been disproportionately affected by noise, air pollution, or other environmental impacts.

MPP-En-9
Enhance urban tree canopy to support community resilience, mitigate urban heat, manage stormwater, conserve energy, improve mental and physical health, and strengthen economic prosperity.

MPP-En-10
Support and incentivize environmental stewardship on private and public lands to protect and enhance habitat, water quality, and other ecosystem services, including protection of watersheds and wellhead areas that are sources of the region's drinking water supplies.

MPP-En-11
Designate, protect, and enhance significant open spaces, natural resources, and critical areas through mechanisms, such as the review and comment of countywide planning policies and local plans and provisions.

MPP-En-12
Identify, preserve, and enhance significant regional open space networks and linkages across jurisdictional boundaries through implementation and update of the Regional Open Space Conservation Plan.

MPP-En-13
Preserve and restore native vegetation and tree canopy, especially where it protects habitat and contributes to overall ecological function.

MPP-En-14
Identify and protect wildlife corridors both inside and outside the urban growth area.

MPP-En-15
Provide parks, trails, and open space within walking distance of urban residents. Prioritize historically underserved communities for open space improvements and investments.

MPP-En-16
Preserve and enhance habitat to support healthy wildlife and accelerate the recovery of salmon, orca, and other threatened and endangered species and species of local importance.

MPP-En-17
Maintain and restore natural hydrological functions and water quality within the region's ecosystems and watersheds to recover the health of Puget Sound.

MPP-En-18
Reduce stormwater impacts from transportation and development through watershed planning, redevelopment and retrofit projects, and low-impact development.

MPP-En-19
Reduce the use of toxic pesticides, fertilizers, and other products to the extent feasible and identify alternatives that minimize risks to human health and the environment.

MPP-En-20
Restore – where appropriate and possible – the region's freshwater and marine shorelines, watersheds, and estuaries to a natural condition for ecological function and value.

MPP-En-21
Continue efforts to reduce pollutants from transportation activities, including through the use of cleaner fuels and vehicles and increasing alternatives to driving alone, as well as design and land use.

MPP-En-22
Meet all federal and state air quality standards and reduce emissions of air toxics and greenhouse gases.

Environment ACTIONS

REGIONAL ACTIONS

En-Action-1
Open Space Planning: PSRC will work with member jurisdictions, resource agencies, tribes, military installations and service branches, and interest groups to implement conservation, restoration, stewardship, and other recommendations in the Regional Open Space Conservation Plan. PSRC will review and comment on alignment with the Regional Open Space Conservation Plan during the comprehensive plan certification process. On a periodic basis, evaluate and update the plan.

En-Action-2
Watershed Planning Support: PSRC and the Puget Sound Partnership will coordinate to support watershed planning to inform land use, transportation, and stormwater planning and projects that improve the health of Puget Sound.

En-Action-3
Watershed Planning: Counties and cities, together with other jurisdictions in the watershed, will continue to participate in watershed planning to integrate land use, transportation, stormwater, and related disciplines across the watershed to improve the health of Puget Sound. Include planning for culvert removal and work with tribal, federal, state, and local governments in planning, funding, and implementation to ensure the effective and efficient use of funds to restore salmon habitat.

LOCAL ACTIONS

En-Action-4
Local Open Space Planning: In the next periodic update to the comprehensive plan, counties and cities will create goals and policies that address local open space conservation and access needs as identified in the Regional Open Space Conservation Plan, prioritizing areas with higher racial and social inequities and rural and resource land facing development pressure. Counties and cities should work together to develop a long-term funding strategy and action plan to accelerate open space protection and enhancement.