
Chapter 9
Natural Environment
Proposed Amendments Z10000-55-COMP
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9.1 INTRODUCTION

This chapter addresses the natural environment of Spokane and the surrounding region. The natural environment element includes topics such as rivers, wetlands, the urban forest, nature areas, the aquifer, clean air, shorelines, trails, energy, agricultural lands, the economy, and wildlife.

Natural Setting

Spokane enjoys an extensive natural environment for an urban area. Not many other cities have the amount of nature space and the presence of native plants and animals as Spokane does. Because of the beauty and bounty, Spokane is rich in history as a gathering place for native and modern day cultures. Over time, however, the gathering of an industrialized culture has taken its toll. Latah Creek and the Spokane River do not run as clean nor do they support fish and wildlife the way they used to, the air is not as easy to breathe, and the aquifer is increasingly pressured by pollution. Spokane must continue to protect and enhance the natural environment in order to maintain and improve this region's quality of life.



Background History

Spokane grew quickly during the early 20th century, and the natural environment was altered proportionally. Land was cleared for commerce and housing, bridges were built across the river, dams were constructed for electricity, industry was developed over the aquifer, and roads were crisscrossed over the landscape. At the same time, early leaders recognized the importance of Spokane's setting and the natural environment and preserved areas for parks and natural areas along the river. After a couple of decades of rapid growth, Spokane leveled off and grew little for fifty to sixty years.

Current Trends

~~Recent growth trends continue. More recently, growth has started again~~ to impact the natural environment in and around Spokane. More water is being drawn out of the aquifer, more sewage must be treated and released into the river, more vehicles contribute to the poor air quality, more garbage must be incinerated, ~~sprawling~~ development replaces ~~farmland and~~ open space, and more wildlife habitat is altered or lost. At the same time, citizens increasingly ask for improved natural areas, trails, clean air and water, and protection for wildlife and their habitat.

The Future

This chapter states goals and policies that restore, protect, and enhance features of the natural environment. Goals and policies guide incentives, regulations, future plans, and public investments. These measures aim to bring back and maintain all that can be great in Spokane: clean rivers and streams, healthy air, natural areas with native vegetation, trails, sacred and historic sites, trees, native land forms, and citizens who understand the impacts of growth on the natural environment and the opportunities to make positive changes.

One of Spokane's greatest assets is its natural setting. Time and again new-comers and old-timers cite the natural environment as a key reason for living here. The health of the natural environment is the foundation of the quality of life residents of this city enjoy. This can be a city where citizens feel good about what future generations will inherit. Spokane can continue to stand out from the rest if it chooses.

Overview

Water is essential for all life forms and must be protected in this region from both a quality and quantity perspective. All drinking water for the entire city is drawn from wells sunk into the sole source, the Spokane Valley - Rathdrum Prairie Aquifer. The protection of the aquifer from contaminants and techniques for conserving water are addressed in this chapter, while information that provides a better understanding of aquifer recharge rates is also included.

Surface water quality and quantity is also covered in this chapter. Policies call for watershed studies, impervious surface reductions, pollution free industrial areas, and maintaining natural areas along Latah Creek and the Spokane River.



Although ~~by federal standards~~ air quality has improved in Spokane, a long road lies ahead in ensuring clean air. Automobile emissions are one of the greatest contributors to poor air quality. Policies in this chapter support public transit and development patterns that help make our community less reliant on ~~an~~ automobiles for every trip. Air quality policies also support maintaining vegetation that helps clean the air. Protecting and enhancing the native plants, trees, and animals of our city is an important goal. Policies in this section describe requirements and incentives for maintaining native vegetation, which is crucial to preserving and enhancing animal habitats.

Spokane's natural setting is stunning. Key landscape features like basalt cliffs and rock outcrops, ponderosa forests, and gorge-like valleys define our region. These features are integrated through the protection of steep slopes, purchase of conservation lands, and preservation of wildlife corridors. The City of ~~Spokane~~ Spokane will continue to purchase lands that are in a natural state to add to the conservation land supply. Trails and paths will connect conservation lands, and in cases where they do not interrupt the wildlife or environmental sensitive areas, paths will be included in conservation lands.

It has ~~been longlong been~~ recognized that a high quality natural environment ~~enhances our community's~~ is a vital part of a high quality of life, which ~~in turn contributes to is a big factor in~~ development vitality. This element attempts not only to maintain a high quality natural environment but to encourage new jobs and retain existing jobs that benefit the natural environment. Some of these include recruitment of cottage industries that use local materials, labor, and markets.

Additionally, the urban forest is an important feature in measuring Spokane's quality of life. Urban forests include not only street trees but the entire tree canopy of the city and its relationship to areas outside the city. The urban forest needs to be enhanced and protected for aesthetic, air and water quality, energy, and wildlife reasons.

Finally, this chapter concludes with policies that encourage energy conservation, environmental education, and quality of life indicators and benchmarks. ~~The latter appears throughout this comprehensive plan as part of many topic chapters.~~

9.2 GMA GOAL AND REQUIREMENTS AND COUNTYWIDE PLANNING POLICIES

GMA Natural Environment Planning Goal (RCW 36.70A.020)

The Washington State Growth Management Act (GMA) includes 13 goals, which were adopted to guide the development and adoption of comprehensive plans and development regulations. The GMA does not require a natural environment element. Based on citizen input and the importance of the natural environment relationships with all other topics, Spokane has chosen to include a natural environment element. The following is the GMA environment goal (Goal 10):

“Protect the environment and enhance the state’s high quality of life, including air and water quality, and the availability of water.”

Countywide Planning Policies

The Countywide Planning Policies (CWPPs), adopted by the Spokane Board of County Commissioners in 1994, do not include the environment as one of the nine policy topics. The environment is, however, mentioned in several areas of the CWPPs.

Six CWPPs under the Policy Topics of Urban Growth Areas (UGAs), Promotion of Contiguous and Orderly Development, Transportation, and Economic Development that reference or relate to the environment were adopted. To reinforce and add greater specificity to the GMA environment goal, the CWPPs also require certain specific actions.

For the text of the six policies, consult the CWPPs document, Countywide Planning Policies and Environmental Analysis for Spokane County, adopted December 22, 1994.

9.3 VISION AND VALUES

Spokane Horizons volunteers identified important themes in relation to Spokane's current and future growth. A series of visions and values was crafted for each element of the Comprehensive Plan that describes specific performance objectives. [The Comprehensive Plan's goals and policies were generated from the Visions and Values document, adopted in 1996 by the City Council, the Comprehensive Plan's goals and policies were generated.](#)

The natural environment is identified by its conservation areas, parks (natural places), topography, geology, views and vistas, habitat corridors, environmental quality, and natural energy benefits.

Vision

"Spokane will be responsible stewards of the environment to ensure clean air and water and healthy trees and parks. Residents will have convenient access to natural and recreational areas inside and outside the city."

Values

"The things that are important to Spokane's future include:

- ◆ Protecting and replanting street trees, trees in parks, and private trees.
- ◆ Guaranteeing good clean air and water.
- ◆ Preserving the natural environment outside the city.
- ◆ Maintaining a close connection to the outdoors, recreation, and nature areas.
- ◆ Using alternatives to personal automobiles to save energy and protect the environment.
- ◆ Recognizing the uniqueness of the four seasons and the climate.
- ◆ Recycling.
- ◆ Being responsible stewards of the environment.
- ◆ Keeping areas where wildlife live.
- ◆ Maintaining the availability of open space, golf courses, and trails.
- ◆ Maintaining tree-lined streets and the natural beauty.
- ◆ Preserving the Spokane River and Latah Creek."

9.4 GOALS AND POLICIES

Goals and policies provide specificity for planning and decision-making. Overall, they indicate desired directions, accomplishments, or aims in relation to the growth and development of Spokane. Additional materials for this chapter are located in the Draft Comprehensive Plan/EIS, Volume 2, Chapter 23, Natural Environment.

NE 1 WATER QUALITY

Goal: Protect the Spokane Valley - Rathdrum Prairie Aquifer and other water sources so they provide clean, pure water.

Policies

NE 1.1 Aquifer Study

Continue to study the aquifer and utilize strategies to remedy all sources or activities of contamination.

Discussion: ~~This study shall recognize existing information but will not duplicate past work or rely totally upon it.~~ All studies and strategies shall be based on the best scientific information available. Focus on moving land use activities that have the potential for groundwater pollution away from being over the aquifer.



NE 1.2 Stormwater Techniques

Identify innovative stormwater techniques that protect ground and surface water from contamination and pollution.

Discussion: It is uncertain whether swales and dry wells have been applied correctly or properly to mitigate stormwater runoff in Spokane. The ~~city is engaged in a process to point of this policy is to find techniques that~~ ensure that stormwater runoff ~~is~~ does not negatively impacting surface and ground water sources. Ensure that identified techniques do not negatively impact adjacent properties, considers homeowner protections, and are coordinated regionally.

NE 1.3 Regional Water Board

Create a regional water board or agency that has aquifer planning, allocating, monitoring, and study responsibilities for the entire watershed.

NE 1.4 ~~Quality of Life~~ Water Quality Report

Prepare an annual ~~quality of life~~ water quality report that identifies the year's water quality and quantity and compares these to prior years.

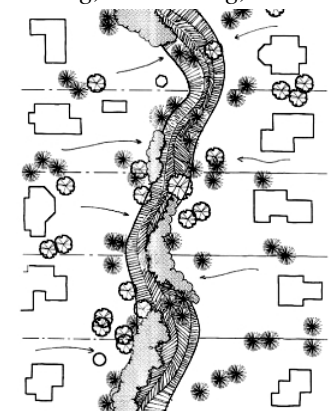
NE 1.5 Mining Activities

Prohibit open pit mining that exposes the aquifer or ground water to potential contamination.

NE 1.6 Natural Water Drainage

Identify and preserve areas that have traditionally provided natural water drainage.

Discussion: Natural drainage areas should be preserved or acquired to accommodate future stormwater runoff and protect surface and ground water.



NE 1.7 Wellhead Protection

Allow only non-polluting land uses within the water recharge zones of the public water wells.

NE 1.8 Toxic Dumping Restrictions

Retain and enforce laws against dumping toxic fluids where they may reach the aquifer.

NE 1.9 Sewer Requirement

Ensure that every developed property in the city and its urban growth area is sewerred to minimize aquifer contamination.



NE 2 SUSTAINABLE WATER QUANTITY

Goal: Ensure all aquifers and water sources are not depleted below sustainable, recharge, or flow levels.

Policies

NE 2.1 Water Conservation

Begin a water conservation program that decreases household, commercial, industrial, and agricultural water use.

Discussion: Although the city is not facing any apparent water shortages, prudent use of water should be practiced until more is known about the capacity of the aquifer. Benchmark standards should be established to monitor water consumption and aquifer capacity. Further, water billing practices should be revised to encourage water conservation. Opportunities to recycle water in industrial coolant activities and the use of treated water for non-food irrigation purposes should be explored.

NE 2.2 Landscaping Requirements

Use incentives in landscape requirements that encourage application of drought tolerant native trees and plants.

NE 2.3 Native Tree and Plant Protection

Preserve native vegetation in parks and other publicly owned lands in the design and construction of new public facilities.



~~NE 3 SHORELINES~~

~~**Goal: Protect the natural state of shorelines while providing community access that does not negatively impact riparian habitats, fragile soils, and native vegetation.**~~

~~Policies~~

~~NE 3.1 Shoreline Inventory and Improvements~~

~~*Inventory the environmental and biological quality of all shorelines within the city and make needed improvements.*~~

~~**Discussion:** Desired improvements to fragile shoreline environments that have been compromised by urban development or use include removal of hard surfaces and restoration with the replacement of native vegetation.~~

~~NE 3.2 Public Access~~

~~*Create public access points in shoreline areas that do not disturb the natural habitat.*~~

~~NE 3.3 Public Interest and Private Rights~~

~~Utilize shoreline regulations to protect the interests of the public while acknowledging and respecting private property rights.~~

~~NE 3.4 Shoreline Environments~~

~~Preserve the integrity of the five shoreline environments (Urban Intensive, Urban Transition, Urban and Conservancy, Conservancy, and Rural) through the application of shoreline regulations appropriate to the specific environment.~~

~~**Discussion:** Different segments of the shoreline exhibit different economic, recreation, and conservation values. Shoreline regulations and building setbacks should be consistent with the use and environment in which they are applied.~~

~~NE 3.5 Visual Access~~

~~Preserve public view points and view corridors from upland shoreline properties, shoreline banks, and public thoroughfares.~~

~~**Discussion:** A program to preserve places that offer views of noteworthy shoreline features such as the falls and the confluence of the Spokane River and Latah Creek relies on the identifying and mapping of potential view sites and formal designation of the most valuable by the city for acquisition.~~

~~NE 3.6 Land Acquisition~~

~~Establish a program to acquire waterfront lands or easements for sites and pathways that are exceptionally attractive to the public.~~

~~**Discussion:** Attractive sites include wildlife refuges, stands of native trees/old growth, view points, vistas, and basalt outcroppings.~~

~~NE 3.7 Public Shoreline Access~~

~~Encourage the provision of public access to shorelines by pathways, plazas, patios, view points, vistas, view corridors, open space, or other related public access amenities that does not negatively affect riparian and fish habitats.~~

~~NE 3.8 Water Recreation~~

~~Develop attractive sites for water dependent and water oriented public leisure and recreation activities, and improve existing sites in accordance with an area wide recreational facilities plan.~~

~~**Discussion:** Opportunities to expand the public's water recreation experiences depends on proactive identification of desired sites and an acquisition budget in the Capital Facilities Program.~~

~~NE 3.9 Site and Structure Preservation~~

~~Preserve shoreline and structures having historic, scientific, cultural, or educational value.~~

~~NE 3.10 Restoration~~

~~Restore blighted areas along the shorelines to a natural or rehabilitated condition.~~

~~NE 3.11 Public Facilities~~

~~Design and locate public facilities in shoreline environments to provide view points, view corridors, and shoreline access.~~

~~**Discussion:** Public facilities in shoreline environments should provide public access in site design to minimize intrusion in the shoreline environment.~~

~~NE 3.12 Higher Intensity Developments~~

~~Allow all shoreline developments, except for the most restricted low intensity urban areas, only by conditional use permit to incorporate the public values of the shoreline environment into conditions of project approval.~~

~~**Discussion:** A conditional use permit provides the opportunity to incorporate innovative design, ensure adequate setbacks, maintain ample open space between structures, preserve views and apply other mitigations within the sensitive shoreline setting by designing higher intensity projects as planned unit developments.~~

~~NE 3.13 Agriculture~~

~~Utilize appropriate farm management techniques to reduce harmful bank erosion and sedimentation, to prevent contamination from fertilizer and pesticide applications, and to maintain a healthy habitat for fish and wildlife.~~

~~NE 3.14 Transportation~~

~~Design and maintain circulation routes that do not intrude into shoreline areas yet allow public viewing and access to shorelines while minimizing pedestrian and vehicular impacts to wildlife habitats and other sensitive natural areas.~~

~~**Discussion:** All new roads should be located outside shoreline areas and designed, constructed, and maintained to cause the least possible adverse impacts on the lands and water environments. These facilities should minimize the need for shoreline protection measures, respect the natural character of the shoreline, and make every effort to preserve fish and wildlife and their habitats.~~

~~NE 3.15 Water Recreation in Non-Motorized Craft~~

~~Promote the natural setting of non-intensive shoreline environments by only allowing non-motorized watercraft in the Downriver Gorge Conservancy and the Latah Creek Rural environments.~~



NE 4 SURFACE WATER

Goal: Provide for clean rivers that support native fish and aquatic life and that are healthy for human recreation.

Policies

NE 4.1 Watershed Plan

Develop watershed plans for all watersheds that are associated with the geographic boundaries of the city.

Discussion: Coordinate with all interested agencies, jurisdictions, and citizens groups in the development of watershed plans.

NE 4.2 Zero Pollution Industrial Parks

Develop zero pollution industrial parks that focus on manufacturing activities that recycle wastes within their facilities or through adjoining industries in the park.

NE 4.3 Impervious Surface Reduction

Continue efforts to reduce the rate of impervious surface expansion in the community.

Discussion: Impervious surfaces do not allow stormwater to naturally percolate into the soil and recharge ground and surface waters, and cause an increased amount of stormwater runoff that

can affect adjacent properties or water bodies. Mitigating the negative effects of increased stormwater often requires expensive engineered solutions. Some impervious surfaces are contaminated with substances that are carried with stormwater to ground and surface waters. Increases in impervious surface area do not need to accompany all growth; the alternative is to grow more efficiently and effectively. This can be accomplished by maintaining natural drainage patterns, increased vertical development and higher housing densities (which decreases the amount of impervious surfaces per person).

NE 4.4 Shorelines

Protect the natural state of shorelines and protect against negative impacts to riparian habitats, fragile soils, and native vegetation.

Discussion: Policies pertaining to shoreline management are located in Chapter 14, Shoreline Master Program.

NE 5 CLEAN AIR

Goal: Work consistently for cleaner air that nurtures the health of current residents, children and future generations.

Policies

NE 5.1 Clean Heating Sources

Encourage the use of heating sources that do not negatively affect Spokane's air quality.

Discussion: As a member of the Spokane County Air Pollution Control Authority Regional Clean Air Agency (SCAPCA-SRCAA), the city should support SCAPCA's-SRCAA's efforts to maintain clean air for Spokane's residents.



NE 5.2 Alternative Transportation Modes

Pursue Continue to encourage a land use development and design pattern that allows people to walk, bicycle, or use mass transit to improve air quality through reduced use of single-occupant combustion vehicles.

NE 5.3 Downtown Improvement

Design a downtown area that meets people's living, shopping, working, spiritual, and residential needs ~~that~~ and doesn't require the daily use of automobiles for transportation purposes.

NE 5.4 Alternative Powered Buses

Support alternatives to diesel powered buses that reduce noise and air pollution while conserving fuel.

NE 5.5 Alternative Transportation Incentives

Encourage businesses-employers of all sizes to develop employee incentive programs that reward the use of alternative transportation.

NE 5.6 Barrier Free Environments

Create barrier free walking and bicycling environments throughout the city in order to make alternative transportation a viable option.

NE 5.7 Facility Review

Review and determine public benefits in comparison to the environmental impacts of new and existing public or private facilities that negatively impact the region's air quality and health of its citizens.

Discussion: As a periodic activity, monitoring and evaluation of such facilities and operations as the Waste To Energy Plant, Regional Solid Waste Compost Facility, and City Combined Operations Facility should be conducted to insure that they are the best solutions for the community's well-being.



NE 5.8 Solid Waste Disposal

Maintain a solid waste system that bases its primary means of solid waste disposal on the principles of reduction, reuse, and recycling.

NE 5.9 Packaging Reduction

Create and support legislation, education, and other means that reduce product packaging so that waste disposal is decreased.

NE 5.10 Profit From Waste

Recruit industries that can make use of and profit from Spokane's solid waste in a ~~non-environmentally impacting~~ manner that minimizes or mitigates environmental impacts.

NE 5.11 Vegetation

Plant and ~~protect from destruction,~~preserve vegetation that benefits local air quality.

Discussion: Plants provide life-essential oxygen. The amount of trees required to mitigate local air pollution should be studied. Plant areas of the city that are most impacted by air pollution with native oxygen-creating plants.

NE 5.12 Unpaved Streets and Alleys

Pave dirt streets and alleys to limit the amount of unhealthy particulates in the air.

Discussion: Dirt streets and alleys contribute greatly to the unhealthy particulates in air. The city should look for other funding sources in addition to local improvement districts (LIDs).



NE 6 NATIVE SPECIES PROTECTION

Goal: Protect and enhance diverse and healthy native species, such as the plants, trees, animals, and fungi, for children and future generations and respect the ecological necessity of bio-diversity.

Policies

NE 6.1 Native and Non-Native Adaptive Plants and Trees

Encourage the use of and develop~~ment~~ of standards for using native and non-native adaptive plants and trees in landscape designs for public and private projects.

Discussion: The benefits of using native vegetation in project designs include water conservation and increased habitat. An example of an incentive for this practice is to provide design assistance to applicants in the development of native landscape plans.

NE 6.2 Citizen Recognition

Recognize citizens who use native plantings in their yards.

Discussion: A program for formal acknowledgment of citizens who practice native landscaping could be created by the city's Urban Forestry Committee. Certificates of appreciation and recognition by the media are potential forms of acknowledgement.

NE 6.3 Habitat Network

Identify, preserve or purchase, and maintain existing and potential links between wildlife habitat areas in order to form a network of wildlife habitats.

NE 6.4 Fish and Wildlife Protection

Continue to identify and protect those fish and wildlife and their habitats, which are identified as a-priority by citizens and scientific experts.



NE 6.5 Protection of Adjacent Wildlife Habitats

Coordinate with adjacent jurisdictions and agencies to designate, protect, and acquire wildlife habitats that abut or straddle the city limits or urban growth boundary.

NE 7 NATURAL LAND FORM

Goal: Preserve natural land forms that identify and typify our region.

Policies

NE 7.1 Land Form Identification

Define, identify, and map natural land forms that typify our region and warrant protection.

Discussion: Some of the natural land forms in the Spokane region include the following: pine forests, Mount Spokane skyline, aquifer springs, Palouse hills, scab lands, Spokane River falls and rapids, basalt cliffs, Missoula flood stones, granite hillsides, basalt ponds and wetlands, camas fields, and shrub steppe drylands.

NE 7.2 Land Form Protection

Purchase lands that contain natural land forms or protect them with incentives, clustering, or transfer of development rights.

Discussion: The city should consider the protection of natural land forms in the decision criteria of for public land purchase.

NE 7.3 Rock Formation Protection

Identify and protect basalt rock formations that give understanding to the area's geological history, add visual interest to the landscape, and contribute to a system of connected conservation lands.

Discussion: Two primary tools for rock formation protection are acquisition with funding sources, such as Conservation Futures, and encouraging provision of information to developers to protect a site's natural features. ~~during the site plan review process.~~



NE 7.4 Unstable Slope Protection

Continue to designate unstable slopes as not suitable for development.

Discussion: Ground stability is an increasingly critical issue as landforms exceed 30 percent slope. Only proposals that demonstrate the ability for safe development without harming current or future occupants of the site or neighboring properties should be allowed. In most instances, the expertise of a licensed geo-technical engineer is required to make this proof.

NE 7.5 Slope Protection

Integrate the protection of slopes with wildlife corridor and nature space designations and acquisitions.

NE 7.6 Geologically Hazardous Areas

Continue to classify, designate, and protect Geologically Hazardous Areas as outlined in the Critical Areas Report.



NE 7.7 Wetlands

Enforce regulations that achieve no overall net loss in acreage and functions of the remaining wetland base and, over the long term, increase the quantity and quality of wetlands in the city.

Discussion: Wetland policies and regulations should be re-evaluated to ensure the function and values of wetlands are being fully protected.

NE 8 AGRICULTURAL LANDS

Goal: Preserve land and provide opportunities for farming that generates produce for local markets and supports the farming economy.

Policies

NE 8.1 Agricultural Lands of Local Importance

Designate areas of the city that have been used traditionally for agricultural purposes, have at least Soils Conservation Services Class II soils or designated prime agriculture lands, and are at least one acre in size as agricultural lands of local importance.

NE 8.2 Agricultural Land Assessments

Reflect appropriately the true value of property designated and being used for agricultural purposes when determining its assessed valuation.

Discussion: County assessor appraisals are partly a reflection of planned land use. It is important that the assessor's records show the official plan designation for these properties as one basis for an appraisal.

NE 8.3 Compatible Agricultural Activities

Allow agricultural activities adjacent to urban uses without compromising farmer's-farmers' rights to farm their land.

Discussion: Preservation of agricultural activity within a broader urban setting poses potential operational, environmental, and lifestyle conflicts. The designation of agricultural lands within the city should address the allowed agricultural activities to insure-ensure urban compatibility, particularly at the immediate interfaces with urban uses.

NE 9 SUSTAINABLE ECONOMY

Goal: Enhance the natural environment to support a thriving sustainable economy.

Policies

NE 9.1 Environment and the Economy

Identify, preserve, and enhance the natural environment elements that define Spokane's quality of life and help sustain the economy.

Discussion: High environmental quality is one of the area's assets and reasons for business to locate or expand in Spokane. For many people, the area's natural setting and environmental resources are their primary reason to live here.

☐ NE 10 NATURAL ENVIRONMENT AND EMPLOYMENT

Goal: Create employment that enhances the natural environment.

Policies

NE 10.1 Environment Supporting Businesses

Provide incentives for businesses that restore and benefit the natural environment while providing jobs for local residents.

NE 10.2 Local Business Support

Support and provide incentives for businesses that employ local people, use local materials, and sell their products and/or services locally.

Discussion: Using local resources and selling products and/or services locally preserves existing businesses and saves in transportation costs and impacts.

NE 10.3 Economic Activity Incentives

Identify and provide incentives for economic activities that combine the goals and principles of economy, ecology, and social equity.

☐ NE 11 NATURE SPACE

Goal: Designate a nature space network (nature space and connecting corridors) throughout Spokane that supports native habitats and natural land forms.

Policies



NE 11.1 Nature Space Identification

Identify nature space throughout the city, based on neighborhood input, existing city-owned conservation lands, wildlife habitats, steep slopes, wetlands, riparian areas, adjacency to county nature spaces, and proximity to state parks.

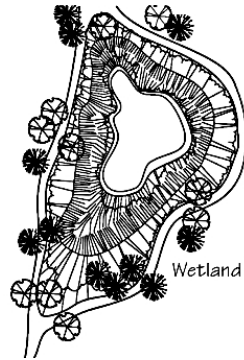
NE 11.2 Corridor Links

Identify corridors that link nature space areas.

NE 11.3 Acquisition Techniques

Acquire nature space and connecting corridors ~~combination of~~ acquisition techniques available network.

Discussion: Ideas for acquisition beyond include nature space tax incentives, Spokane Futures funds, volunteer fund drives or transfer of development rights, clustering of development, development set asides, easements or contribution requirements, and application of grant funding.



using ~~any~~ one or more to create a nature space

outright purchase
County Conservation
donations of lands,

NE 11.4 Nature Space Paths

Develop soft, permeable, low impact paths in nature space areas.

Discussion: In the process of developing new paths, identify existing soft pathways. New pathways should be located away from environmentally sensitive portions of the natural areas.

NE 11.5 Spokane River Gorge

Pursue the Spokane River Gorge as a natural area and maintain this place as one of our region's greatest resources.

Discussion: The Spokane River Gorge is a natural connection between Riverfront Park, Latah Creek, Indian Canyon, and Riverside State Park. The historical significance of the Gorge to native and early pioneering cultures should be emphasized in how the area is protected. Various historical and cultural experiences should be developed without harming the riparian habitat.

NE 12 URBAN FOREST

Goal: Maintain and enhance the urban forest to provide good air quality, reduce urban warming, and increase habitat.

Policies



NE 12.1 Street Trees

Plant trees along all streets.

Discussion: Installing street trees along all residential and arterial streets is the easiest and most cost effective way to secure the environmental benefits of urban forestry. Street trees planted in buffer strips between the curb and sidewalk should be included in every street project or private development.

NE 12.2 Urban Forestry Programs

Continue to participate in ~~Consider joining~~ the Spokane County Conservation District for urban forestry programs, protection, and maintenance. ~~Until joining, have a program that accomplishes the equivalent of the Conservation District program.~~

NE 12.3 Protection Techniques

Use incentives and acquisition to protect forested areas both on publicly and privately owned land.

NE 12.4 Forest Inventory Database

Maintain an inventory of the urban forest in the city's Geographic Information System.

NE 12.5 Tree Replacement Program

Do not allow tree removal in the public right-of-way without a program for tree replacement.

Discussion: The city should adopt a practice of “no net loss” in street trees. Permits to remove street trees should only be granted when they are determined by the city to be sick, damaged, or near the end of life. Removal for life, safety, or other emergencies is the determination of public safety officials.





NE 13 ~~PARK AND PLAZA LINKS~~ CONNECTIVITY

Goal: Create a citywide network of paved trails, designated sidewalks, and soft pathways that link regional trails, natural areas, parks, sacred and historical sites, schools, and urban centers.

Policies

NE 13.1 Walkway and Bicycle Path System

Identify, prioritize, and connect places in the city with a walkway or bicycle path system.

Discussion: At a minimum, this system shall include connection to the regional trails, natural areas, soft path networks, community parks, sacred and historic sites, schools, the downtown area, and community and neighborhood centers.

NE 13.2 Walkway and Bicycle Path Design

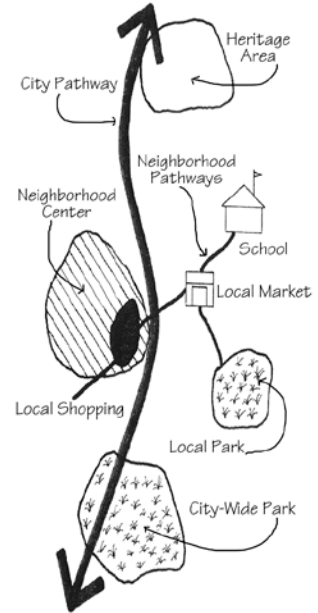
Design walkways and bicycle paths based on qualities that make them safe, functional, and separated from automobile traffic where possible.

NE 13.3 Year-Round Use

Build and maintain portions of the walkway and bicycle path systems that can be used year-round.

NE 13.4 Winter Trail Network

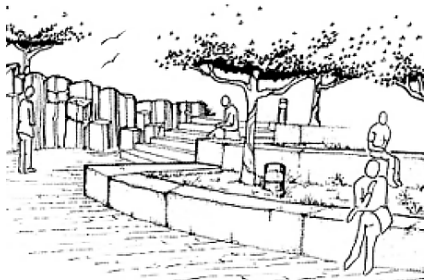
Link soft trails, parks, and golf courses with the walkway and bicycle path system to develop a winter trail network.



NE 14 PLAZA DESIGN WITH NATURAL ELEMENTS

Goal: Develop or revitalize plazas using local nature elements, including water, vegetation, wildlife, and land forms.

Policies



NE 14.1 Plaza Inventory and Improvements

Inventory existing plazas that lack nature elements and that are not used actively and identify natural element features that will improve them.

NE 14.2 New Plaza Design

Develop plazas with native natural elements and formations, such as basalt, Missoula flood stones, stream patterns, river character, native trees, and plants that attract native birds.

☐ NE 15 NATURAL AESTHETICS

Goal: Retain and enhance nature views, natural aesthetics, sacred areas, and historic sites that define the Spokane region.

Policies

NE 15.1 Protection of Natural Aesthetics

Protect and enhance nature views, natural aesthetics, sacred areas, and historic sites within the growing urban setting.

Discussion: The first step toward providing protection is to establish criteria for designating areas of local and regional significance, in consultation with local Native Americans and historians. The established criteria can then be used to identify and map features to be protected. Finally, standards for protection should be adopted by the city to implement the protection program.

NE 15.2 Natural Aesthetic Links

Link local nature views, natural aesthetics, sacred areas, and historic sites with the trail and path system of the city.

NE 15.3 Community Education

Educate the community on the meaning of the sacred and historic sites so that they value their protection and enhancement.

NE 15.4 Naming Culturally Historic Sites

Identify local nature views, natural aesthetics, sacred areas, and historic sites that define the Spokane region with the original names local historic cultures gave to them.

Discussion: The city's Park Board could assist in realizing this policy by considering both Indian and non-Indian names for city park properties such as ~~the recently named~~ Wyakin Park, the ecological park in northwest Spokane.

NE 15.5 Nature Themes

Identify and use nature themes in large scale public and private landscape projects that reflect the natural character of the Spokane region.

Discussion: Nature themes for Spokane include: pine forests, the Mount Spokane skyline, aquifer springs, Palouse hills, scab lands, Spokane Falls, basalt cliffs, Missoula flood stones, granite hillsides, basalt ponds and wetlands, native plants, Spokane River, the gorge with basalt rapids, camas fields, and shrub steppe drylands. An example of this policy application is the ~~new Cheney Cowles Museum~~ [Northwest Museum of Arts & Culture \(MAC\)](#) grounds.



☐ NE 16 QUALITY OF LIFE

Goal: ~~Develop~~ [Compile annual](#) social, natural environment, and economic indicators of a healthy Spokane community [on an annual basis, which are compared and compare them](#) to prior years in order to assess Spokane's progress.

Policies

NE 16.1 Quality of Life Indicators

Coordinate with other groups and agencies to develop quality of life indicators based upon what others have previously identified.

Discussion: The Community Report Card is an existing community process that can accommodate new natural environment quality of life indicators.

NE 16.2 Benchmark Adoption

Adopt benchmarks based on identified indicators that the community wants to obtain over time.

Discussion: The city should incorporate benchmarks in amendments to the Comprehensive Plan to add definition to desired quality of life.



NE 17 NATURAL ENVIRONMENT EDUCATION

Goal: Educate children and the community on how to improve Spokane's natural environment.

Policies

NE 17.1 Protection and Recognition

Develop a program that formally recognizes activities, development, businesses, groups, and people that contribute to the protection and improvement of Spokane's natural environment.

Discussion: An effective recognition program is based on a collaborative effort of the city, media, environmental groups, business organizations, and neighborhoods.

NE 17.2 Natural Environment Sources

Create a central source within city government to disseminate information on anything affecting the city's natural environment, programs to enhance the natural environment, and environmental education opportunities.

NE 17.3 Environmental Education for Children

Educate children about the interrelationship between people and nature so that an understanding and respect for human impacts and the benefits of nature is developed.



NE 18 ENERGY CONSERVATION

Goal: Promote the conservation of energy in the location and design of residential, service, and workplaces.

Policies

NE 18.1 Housing Location

Reduce the daily quantity and distance of private automobile trips by encouraging higher density housing development near major activity centers, along transit routes, and through mixed-use developments.

NE 18.2 Innovative Development

Encourage innovative residential development techniques that produce low energy consumption per housing unit.

Discussion: Examples include attached single-family and multifamily, solar enhancing site orientation, earth sheltering, and the use of renewable energy sources.



NE 19 FLOOD HAZARDS MANAGEMENT

Goal: Protect life and property from flooding and erosion by directing development away from flood hazard areas.

Policies

NE 19.1 ~~Meander Belt~~Channel Migration Zone Management

Conduct studies to determine the ~~meander belt width~~channel migration zone of streams and rivers in the city that have a history of flooding.

Discussion: Constraining a stream ~~/ or~~ river from its natural course or meander can often lead to erosion or flooding. ~~A professional fluvial geomorphologist should conduct this type of analysis.~~

NE 19.2 100-Year Flood Plain Reassessment

Conduct a reassessment of the 100-year flood plain in areas with a history of flooding.

Discussion: Observations and subsequent measurements have provided evidence that a more detailed analysis of the various flood plain boundaries is necessary. ~~A professional engineer, geomorphologist, and/or land surveyor should be used to delineate boundaries.~~

NE 19.3 Land Acquisition/Home Relocation Program

Consider the purchase of homes and lands that are in the reassessed 100-year flood plain and maintain those areas as nature space corridors.

Discussion: Low interest state revolving funds (SRF) are available for these types of purchases. Conservation Futures funding may be available for these purchases as well.

NE 19.4 Discourage Development in 100-Year Flood Plain

Discourage development and redevelopment of habitable structures that are within the reassessed 100-year flood plain.

Discussion: In order to function correctly as a relief valve for a flooding area, 100-year flood plains should remain free of new development.

NE 19.5 Public Awareness and Education

Develop a public awareness and education program for residents living within flood plains.

Discussion: Many residents are caught off guard during flooding events. Preparation can often mitigate the impacts of flooding. Pursue a method of notifying property owners.

NE 19.6 Downstream Impacts Consideration

Consider the downstream impacts created by development, erosion control devices, and public works projects within or adjacent to rivers and streams.

Discussion: Public works projects like bridges and erosion control devices like riprap can impact downstream properties that didn't previously have problems.