

## CHAPTER 5

### FISH AND WILDLIFE HABITAT CONSERVATION

Skagit County is blessed with a high level of topographic and ecological diversity, from deep marine waters and coastal bluffs, to the sub-alpine and alpine zones of the North Cascades Mountains. Such diversity naturally brings a wide array of wildlife species and habitats. Though the amount and location of productive wildlife habitat has been altered ~~through conversion of open lands to agricultural, forestry, and urban uses,~~ there remain large protected areas and many places, which retain high wildlife habitat values. A variety of agencies and private groups are moving to protect special species and habitats, ~~including those for elk, bald eagle, grizzly, and salmon.~~

In recent years, the Washington State Legislature passed a law related to wildlife and recreation statewide. Their basis for this law was:

- ". . . Washington possesses an abundance of natural wealth in the form of forests, mountains, wildlife, waters, and other natural resources, all of which help to provide an unparalleled diversity of outdoor recreation opportunities and a quality of life unmatched in this nation. ... As the state's population grows, the demand on these resources is growing too, placing greater stress on today's already overcrowded public recreation lands and facilities, and resulting in a significant loss of wildlife habitat and lands of unique natural value.
- ... Public acquisition and development programs have not kept pace with the state's expanding population.
- ... Private investment and employment opportunities in general and the tourist industry in particular are dependent upon the continued availability of recreational opportunities and our state's unique natural environment.
- ... If current trends continue, some wildlife species and rare ecosystems will be lost in the state forever and public recreational lands will not be adequate to meet public demands.
- ...There is accordingly a need for the people of the state to reserve certain areas of the state, in rural as well as urban settings, for the benefits of present and future generations.

It is therefore the policy of the State to acquire as soon as possible the most significant lands for wildlife conservation and outdoor recreation purposes before they are converted to other uses, and to develop existing public recreational land and facilities to meet the needs of present and future generations."

In implementing this law, the Washington Recreation Conservation Office (RCO) was given the responsibility to administer grants allocated by the State to accomplish the intent of the Act. Half of the allocated funds go to the Committee's general recreation grants fund. The other half is allocated to a "habitat conservation fund". The grants are matching grants, meaning they require the applicant to provide at least half of the project cost.

~~To be eligible for the general recreation grants, Skagit County must have an approved park and recreation plan on file with the RCO. This plan must be updated every six years to retain eligibility. This Comprehensive Park, Recreation, Recreational Open Space and Trail Plan Update will fulfill this requirement.~~

To compete for habitat conservation grants, the County must also have an approved Habitat Conservation Plan on file with the RCO, or include habitat conservation element in their parks and recreation plan. This section is intended to fulfill this requirement.

During the 2009-2011 biennium, a total of \$42 million was appropriated to the Washington Wildlife and Recreation Program (WWRP), with \$22.5 million (50%) allocated to the habitat conservation. Of the \$22.5 million, 35% is allocated for critical habitat, 20% is allocated for natural areas and 15% is allocated for urban wildlife habitat. The remaining 30% is discretionary. With the current \$45 million allocation, at least \$3.375 million will be available for urban wildlife proposals. Skagit Park lands located on the Skagit River and many of its tributaries are eligible for Salmon Recovery Funding Board (SRFB) grants. SRFB funds are used for both land acquisitions and habitat restoration.

The RCO defines "urban wildlife habitat" as those areas that:

- Provide habitat for wildlife species, food fish, shellfish, or freshwater or marine fish in close proximity to a metropolitan area,
- Serve as a corridor for wildlife movement in existing population areas,
- Include and encourage public use for wildlife interpretation and education.

Grant funds can be used for acquisition and/or development. Facility development is limited to items such as fencing, interpretive or observation trails, interpretive signs or kiosks, restrooms, parking, and creation or enhancement of habitat. An agency cannot submit proposals that involve renovation of an existing facility.

## **HABITAT ELEMENT REQUIREMENTS**

Since passage of the Act, the RCO has been developing and refining the criteria for eligibility for habitat conservation grants. The habitat conservation element must:

- Describe and assess habitat types, species of interest, threats, ownership(s) and historical trends (gains or losses). A map depicting the distribution of these habitat elements in the local, state, federal, and private communities must be included. Use existing information to the greatest extent possible.

In addition to this criterion, the plan must include:

- A statement of the agency's habitat conservation acquisition, development and management goals and objectives;
- An inventory, or assessment of applicant-managed lands with critical habitat, natural area, and urban wildlife habitat values;
- A description of the public involvement process;
- An analysis of public needs and land demands;
- A list of proposed acquisition and development projects.

The RCO suggests several resources to assist in preparation of the element, including Growth Management Act (GMA) planning products and the State's Priority Habitats and Species (PHS) information. A PHS summary map is available for the County. Another suggested tool is an experimental process called GAP Analysis, which is a method to classify wildlife habitats currently being utilized by the Washington State Department of Fish and Wildlife.

## **PROCESS**

The purpose of this Wildlife Habitat Conservation Element is to lay the groundwork for Department qualification for Washington Wildlife and Recreation Program grants. In addition to this process, Skagit County is required under GMA to identify "fish and wildlife conservation areas," which is contained in the Environment Element of the Skagit County Comprehensive Plan.

It should be recognized that areas identified in the Environmental Element to the Skagit County Comprehensive Plan will likely result in citing constraints for the development of recreational facilities identified in the park and recreation plan. The Planning and Community Development Department has completed a critical areas ordinance to address the classification, designation

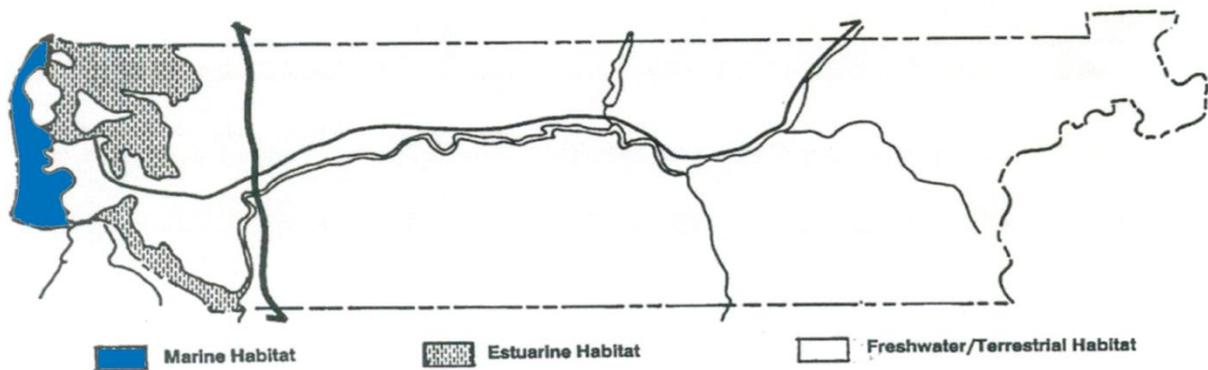
and protection of critical areas as mandated in the Growth Management Act and articulated under WAC 365-190. Under certain circumstances, this ordinance may influence the citing or preclude areas from recreational development.

The process used in preparation of this Element was limited to a summary of existing information related to fish and wildlife and discussions with local agency representatives. Public priorities for fish and wildlife conservation were addressed through a County-wide Parks and Recreation Survey, three community workshops, discussions with a 21-member Citizens Advisory Committee, and public hearings held during plan adoption.

### HABITAT TYPES AND SPECIES

RCO guidance suggests categorizing habitat types according to a system being utilized by the Washington State Department of Fish and Wildlife. This system includes four major categories of habitat; terrestrial, marine, estuarine, and freshwater. This discussion is organized by the four main habitat types, with discussion at the second level where appropriate.

Overall habitat distribution in Skagit County can be generalized as shown below. Approximate acreages of these habitat types are shown in Table 5.1. It should be noted that both the figure and table likely underestimate the relative proportion of estuarine habitat in the County, since upstream boundaries of estuarine habitat are extremely difficult to determine.



**Figure 5.1**  
**Habitat Distribution**  
**Skagit County, WA**

**Table 5.1  
Generalized Habitat Distribution  
Skagit County, WA**

<b>Habitat Type</b>	<b>Approximate Acreage</b>	<b>Percent of Total</b>
Marine	23,531 ac.	1.9 %
Estuarine	78,053 ac.	6.4 %
Freshwater	122,671 ac.	10.1 %
Terrestrial	987,329 ac.	81.5 %
<b>TOTAL</b>	<b>1,211,584 AC.</b>	<b>99.9 %</b>

**Sources: Skagit County Department of Planning, JC Draggoo & Associates**

The following text describes each of the main habitat types in Skagit County, provides an overview of species present, and discusses related trends and concerns.

### **MARINE HABITAT**

**Description:**

Marine habitats are deep-water areas beyond the estuarine zone. According to the RCO classification system, these zones extend landward to the upper limit of wave spray. They have higher salinity levels and colder water temperatures than estuarine zones.

In Skagit County, the marine zone extends west from the western shore of Cypress and Fidalgo Islands to the western County line. The remainder of the County’s tidal and intertidal areas is considered to be estuarine.

**Species and Conditions:**

Species, which typically inhabit marine zones, include harbor seals, orca whales, kelp and other varieties of seaweed, various species of fish and marine invertebrates. Sea birds frequent these areas, as do migrating salmon, steelhead, and whales.

The straits of northern Puget Sound, general, are considered to be components of a very complex and productive ecosystem. The Sound is home to at least 211 species of marine and anadromous fish, as well as a variety of other sea creatures. The open channels, rocky outcrops and islands, and large bays provide wintering and breeding habitat for marine birds including gulls, loons, grebes, cormorants, and a wide variety of diving birds (e.g. auklets, guillemots, murre, puffins, and oyster catchers).

**Trends and Concerns:**

~~One of the greatest concerns related to marine habitat in Skagit County is the potential for oil spills. The water quality of Northern Puget Sound is a major concern of its residents and critical for the survival of Puget Sound marine life. Oil tankers frequently travel between the Anacortes area and ports to the north and efforts are being made at several levels to plan for catastrophic spill events, including paid channel escorts paid by oil companies. A number of factors have been listed as potentially contributing to the degradation of the marine environment in Skagit County. These include changing the near shore by adding artificial structures, such as tide gates and bulkheads increased pollution from various sources, such as failing septic systems, and various impacts from agricultural and industrial activities.~~

## ESTUARINE HABITAT

**Description:**

Estuaries are areas between the marine zone and & freshwater habitats. According to the RCO classification system, waters in these areas have lower concentrations of salts than marine zones (less than 30 parts per thousand). This includes sub-tidal and intertidal zones, as well as lagoons, sloughs and channels, which meet the salinity criteria. Typically, estuaries are shallower and have warmer water temperatures than marine zones.

The dividing line between estuarine and freshwater habitats is defined by RCO as where ocean salt concentration becomes extremely low (0.5 parts per thousand). The dividing line between estuarine and terrestrial habitats is the upper limit of saltwater influence.

In Skagit County, the estuarine zone extends from the eastern edge of the marine zone upstream to a likely maximum of about 5 miles. Many factors affect salinity levels, including the amount of freshwater entering the area, the strength of the tides, and the resulting amount of mixing of fresh and salt water. Salinity is almost never constant at any one point, and varies with depth. The best indicator is not absolute salinity, but the types of animals and vegetation associated with these areas. Some studies have been made of the North Fork of the Skagit River that indicates average salinity levels may drop to 5 ppt near the North Fork Bridge, approximately 3.5 miles upstream of its outlet.

**Species and Conditions:**

The estuarine areas of Skagit County include Samish, Padilla, Fidalgo, Skagit, and Similk Bays, and a variety of sloughs and saltwater wetlands. These areas support over 50 types of fish, 100 types of shorebirds, 40 types of marine algae, 200 small marine animals, and several types of large marine mammals. Some familiar types include: jellyfish, anemones, marine worms, marine

snails, limpets, clams, cockles, oysters, mussels, barnacles, crabs, starfish, urchins, sea cucumbers, and sea squirts. Fish species include; dogfish, herring, anchovy, salmon, sea-run trout, and smelt. Familiar birds include; loons, grebes, cormorants, herons, egrets, swans, geese, brants, a variety of ducks, sandpipers, gulls, murrelets, puffins, and others.

The Pacific Coast Joint Venture group has identified various areas along the Pacific Coast as targets for ecological restoration and enhancement. The Skagit River Estuary is considered their top priority in their five-County "Northern Washington Bays and Straits Focus Area" (Whatcom, Skagit, San Juan, Island and Snohomish Counties). It is identified as one of two first-step priority areas in the United States, due to both its high current estuarine and upland value and opportunities for enhancement.

The Skagit complex supports a winter population of over 40,000 Wrangell Island Snow Geese, the largest wintering population in the world. It is the most important wintering area in Washington for Trumpeter and Tundra Swans, supporting 86% of two species of wintering ducks, and is a feeding area for about half the brants and geese migrating on the Pacific Flyway. The Joint Venture group recommends additional habitat acquisition in both the Skagit Delta and Similk Bay.

State priority wildlife habitats and species in and/or directly dependent on the estuarine zone include bald eagle, seabirds, waterfowl (including heron), osprey and priority estuary areas. Priority fisheries habitats and species in and/or directly dependent upon the estuarine zone include spawning areas for smelt herring, and perch, as well as salmon feeding areas, and downstream portions of salmon and steelhead migration routes. Padilla Bay includes the largest known eelgrass "meadow" in coastal Washington. This meadow supports a diversity of creatures, including 20,000 Black Brant (sea goose), which winter in the area and feed on eelgrass. Winter duck populations in Padilla Bay typically number 50,000, with counts as high as 120,000.

Bald eagles feed on upland creatures, as well as taking dead fish and organisms from the estuarine zone. They have also been observed hunting and killing ducks. Many eagles winter in the areas adjacent to the estuarine zone, and some are year-round residents.

#### **Trends and Concerns:**

~~Historically, diking and filling of many areas in western Skagit County increased the amount of productive agricultural land, but reduced the extent of estuarine areas. Most existing dikes have been in place since the early 1900's, and others have since been proposed, but abandoned due to financial or physical problems. Experts feel passage of the Shoreline Management Act, and designation of large portions of the estuarine zone as "Shorelines of Statewide Significance," has made additional diking projects all but unfeasible.~~

~~Despite the results of diking and drainage activities and the conversion to agriculture as described above, the Padilla and Skagit Bay estuaries are considered to be relatively intact and well-functioning ecosystems. Other bays are limited due to diking for agricultural uses and urban and industrial development. Current threats to estuarine zones in Skagit County include contaminants in the water feeding these areas, boating-related wildlife disturbance, and the aforementioned oil transportation concerns mentioned above.~~

~~Regarding water quality issues, several streams reaching these estuarine zones currently do not meet water quality standards, with the greatest concern being contaminants from agricultural land and potential failure of current and proposed residential septic systems. Oyster beds are particularly susceptible to water quality changes, with half the oyster beds in the State currently "de-certified" (unable to commercially market oysters). The Fir Point area has been de-certified in Skagit County.~~

~~The County, in cooperation with other agencies has completed watershed studies to try to address these problems. The top three priorities are: South Fork of the Nookachamps, Padilla Bay and the Samish River. The Samish initiative has local officials attentively focusing on cleaning up the Samish River. In 2011, warnings were sent out to several cattle ranchers and fines have been placed on two cattle ranchers who refused to act on those warnings. Despite many watershed studies, increasing development pressure in areas near estuarine zones, especially without central sewer service, increases concerns over water quality.~~

## **FRESHWATER HABITAT**

### **Description:**

Freshwater habitats are those lakes, rivers, creeks, and wetlands, not included in the previous categories. They have a low ocean salt content, and support different types of species than estuarine and marine habitats. They include the open water areas, as well as wetland-associated vegetation. Unlike the RCO classification system, which limits the river portions of these habitats to the river channel, river freshwater habitats are considered to extend to the edge of the active floodplain.

In Skagit County, the Freshwater zone extends from the upstream boundary of the estuarine zone to the upstream point of mapped perennial and intermittent streams, and includes lakes, streams and wetlands mapped in the County's freshwater features database. The Skagit River Watershed drains the North Cascades mountain range of Washington, USA and British Columbia, Canada. The watershed encompasses 8,270 km<sup>2</sup> and is the largest watershed in the Puget Sound Basin, providing over 30 percent of all freshwater flowing into the sound. The Samish river drains an area of 139 square miles (360 km<sup>2</sup>) between the Skagit River basin on the south and the Nooksack River basin on the north. The Samish River has runs of seven Salmon and two other

salmonid species including: Spring/Winter Steelhead, Summer Sockeye, Fall Chinook/Chum/Coho, and year-round runs of Cutthroat, and Dolly Varden.

### **Species and Condition:**

Wildlife species typically associated with freshwater ecosystems include mammals and birds that live in these areas or are dependent upon them for food (beaver, river otter, ducks, osprey, frogs, salamanders, etc.), as well as terrestrial and aquatic insects, and resident and migratory fish species (bass, trout, salmon, steelhead, etc.). Notable river fish species in Skagit County include Coho, Chinook, Pinks, Sockeye and Chum salmon, Steelhead, and Shad (migrating species), and trout, whitefish, bass, perch, crappie, catfish, and sturgeon. Many lakes in the County are stocked with trout.

The Skagit River system is the largest basin draining to Puget Sound. Its fishery is of national significance, with five species of salmon, three species of sea-going trout, a nationally-renown sport steelhead fishery, and a variety of resident fish. The system provides an estimated 30% of the young anadromous fish entering the Sound, and is an important fishery to Indian tribes and groups granted fishing rights to it. In 2002, the commercial value of the fishery was estimated to be \$8 million in odd-numbered years (when pink salmon migrate) and \$3.3 million in even-numbered years.

Martha Lake, Barney Lake, and Debays Slough provide important wintering habitat for Trumpeter Swans, and attract many wildlife watchers from November through March. About 20 heron rookeries are known to exist in Skagit County, supporting populations of both green and blue herons, dependent upon nearby freshwater and estuarine wetlands for food.

Side channels, tributaries, and adjacent wetlands provide important spawning and rearing habitat for resident and anadromous fish species. Especially important areas include Minkler Lake and Carey's Creek Slough, Sauk River, Illabot, Day and Finney Creeks, all in upper Skagit River system.

WDFW priority species and habitats within this zone include harlequin ducks, bald eagles, osprey, and areas outlined as riparian priority habitat. Riparian zones are considered to be some of the most productive wildlife habitat available. They provide all elements needed for many species, including food, cover, water, and many species are dependent upon riparian areas for reproducing.

### **Trends and Concerns:**

~~As with estuarine habitat, drainage, diking and other flood control measures have reduced Skagit County's freshwater ecosystem from historic levels. Attempts at channel stabilization have met with mixed success, with many riverbank reinforcements failing and/or creating worse problems~~

~~downstream. Filling of wetlands for development has reduced this type of freshwater habitat. Reservoirs and other impoundments, such as Lake Shannon, have converted portions of river systems to lakes.~~

In general, Skagit County's freshwater habitat is considered to be in relatively good condition in comparison to other, more urban, counties with much of the forest land in public ownership. As with estuarine habitats, development pressure near water sources (and overall) will increase potential for increased sedimentation, contaminants, and removal of streamside vegetation.

## **TERRESTRIAL HABITAT**

### **Description:**

Terrestrial habitats generally include all areas not included in the preceding categories. Basically, they are upland areas, above the marine, estuarine, and freshwater zones.

### **Species and Condition:**

Species that typically inhabit terrestrial habitats include a variety of insects, amphibians, reptiles, large and small mammals, lowland and upland birds, and other creatures, which live in, or are otherwise dependent upon terrestrial habitats. Big game species in Skagit County include deer, elk, bear, mountain goats, and cougar. Upland game species include grouse, rabbit, and pigeon. Many species such as eagles, osprey, and murrelets use other habitats for foraging, building their nests in upland locations.

Washington has the largest population of wintering bald eagles in the lower 48 states, with most found in forested areas west of the Cascades, and the largest concentration (approximately 15% of State total) on the Nooksack River (Whatcom County). The upper reaches of the Skagit River (typically between Rockport and Marblemount) are a popular wintering area for the eagles, which feed on the spawned-out salmon carcasses lining the river.

Nesting, roosting and perching habitat requirements vary, but roosting areas are typically in areas protected from the weather, used only at night, and located in tall, old trees in or near riparian areas. Nesting habitat is typically in mature trees that dominate the surrounding forest and have large horizontal branches. ~~Eagle activity can be adversely affected by nearby human activity. The US Forest Service is currently developing management recommendations to control impacts to wintering eagles from recreational boating.~~



Padilla and Samish Bays support one of the largest known wintering populations of peregrine falcons in North America, including one endangered subspecies. Ten types of raptors (i.e. prey-birds, like owls, hawks, eagles, etc.) winter in the western portion of the County. Wintering birds include peregrine, merlins, and snowy owls. It is reported that all five species of falcon have been observed in the Padilla Bay area on the same day. Since many of the marine islands are in the rain shadow of the Olympic Mountains, they support some species (such as golden eagles) that are not typically found in other portions of western Washington.

Big game winter range areas are essential to maintaining deer, elk and mountain goat populations. During average to mild winters, these animals can usually find food and cover up to 3,000 feet in elevation. During severe winters, however, forage and cover at or below 2,200 feet is critical. The most important component of winter habitat is thermal cover, typically provided by mature forest areas. Deer and elk winter range is typically associated with drainages and their adjacent riparian areas. Mountain goat winter ranges are typically steep rocky slopes of 40 degrees or more, or mature forest stands in lower areas.

WDFW priority species directly dependent upon the terrestrial zone in Skagit County include: grizzly bear, gray wolf, Roosevelt elk, northern goshawk, peregrine falcon, spotted owl, bald eagle, marbled murrelet, osprey, pileated woodpecker, and Townsend's Big-Eared Bat.

**Trends and Concerns:**

~~Terrestrial habitat in Skagit County has replaced former estuarine and freshwater habitat eliminated through the diking and filling processes discussed above. Agricultural cultivation of these and former open lowlands has reduced species diversity, as has forest management in current and former wooded areas. Suppression of wildfire in forested areas has resulted in less open meadows, and more forested areas, than if fires had been allowed to burn unchecked. Though road building on Forest Service lands opened up previously un-impacted areas to human use and timber harvest, federal forest policy changes will likely see limited new road construction, and the elimination and/or conversion (possibly to trail) of many miles of existing roads.~~

~~One of the largest threats to terrestrial habitat is its conversion to urban uses. On a statewide basis, it is estimated that an area the size of Spokane (30,000 acres) is converted from its natural condition each year. One impact especially relevant in Skagit County is the reduction of lowland~~

~~big game winter range as these areas are converted to other uses, or as additional roadways and human activity fragment animals from areas that can be safely used in the winter. Recreational overuse is also a concern, as many sites when converted to parks or other recreation lands lose most of their habitat value due to development and/or human-related disturbance. The loss of old growth habitat is also a concern, with only remnant stands in isolated pockets scattered throughout the county, including a stand at Rockport State Park.~~

~~Lastly, public viewing of wildlife can result in harassment, whether intentional or not. The desire of many to get closer to these animals, see them take flight, or attract their attention can result in overtiring of animals, insufficient feeding, and abandonment of areas and nests. These problems are currently occurring with wintering Trumpeter Swans near Barney Lake.~~

### **PRIORITY HABITATS AND SPECIES**

In order to assist counties and other agencies in incorporating wildlife concerns into their planning process, the Washington State Department of Fish and Wildlife developed the Priority Habitats and Species Program. Through this program, state biologists have generated countywide maps of areas used by high-priority wildlife species, as well as high priority habitat areas. Priority habitats are areas that are valuable for the number and/or diversity of species present, are important breeding, travel, or foraging areas, or are rare and/or vulnerable. Priority species include those wildlife species with populations that are currently or potentially threatened with extinction, as well as those that are highly sensitive to habitat loss.

Priority Habitats and Species are mapped in detail, on 7.5-minute USGS quadrangle base maps. Skagit County includes at least 10 of the possible 24 priority habitat areas, as well as confirmed sightings of at least 12 of 60 priority species. These are listed in Table 5.2 below.

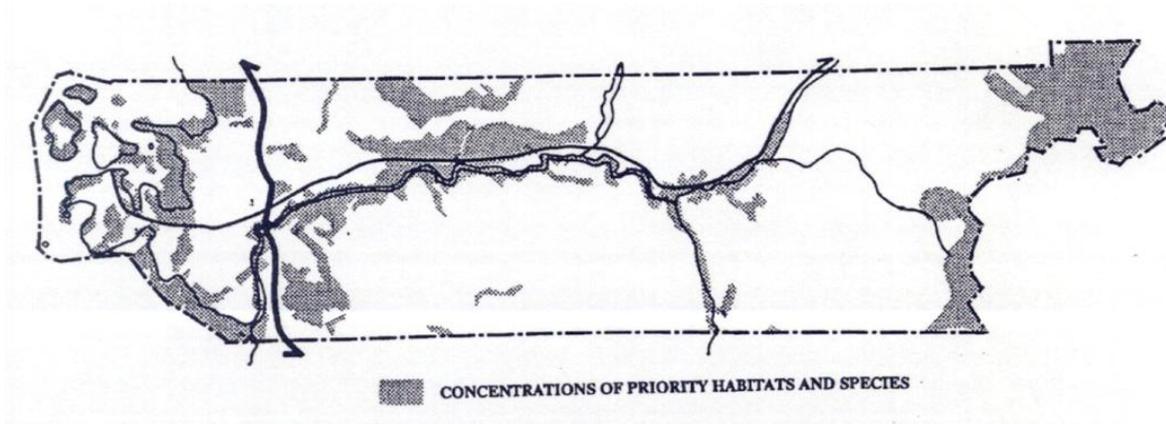


**Table 5.2**  
**Priority Habitats and Species**  
**Skagit County, WA**

Priority Habitats	Priority Species
Caves	Bald Eagle
Cliffs/Bluffs	Golden Eagle
Estuarine Zone	Grizzly Bear
Riparian Area	Harbor Seal
Snag-Rich Area	Harlequin Duck
Urban natural Open Space	Marbeled Murrelet
Wetlands	Northern Goshawk
Critical Spawning Habitat for Resident Species	Osprey
Anadromous Fish Runs	Pileated Woodpecker
Resident Fish Reaches	Rocky Mountain Elk, Townsend's Big-Eared Bat, Trumpeter Swan

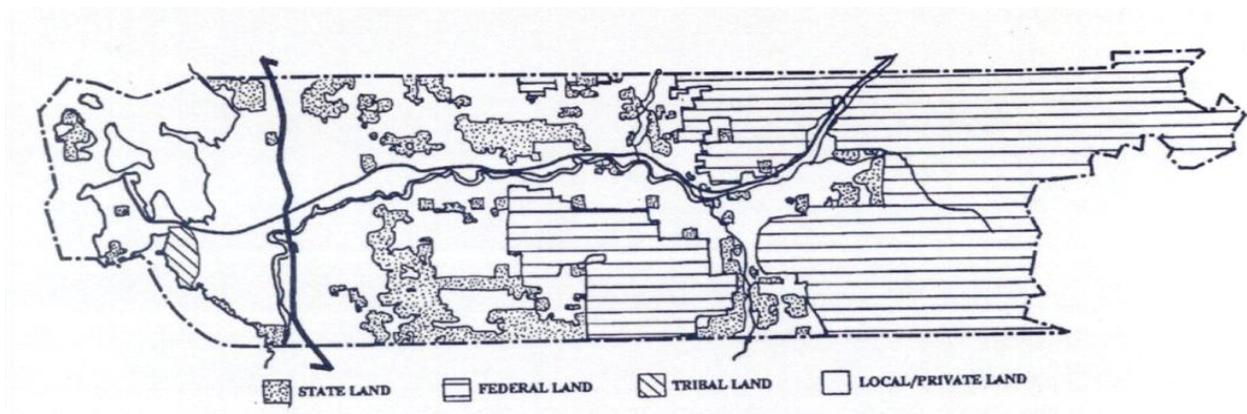
Figure 5.2 is a summary of large priority habitat areas. As shown, these occur primarily along coastlines, river corridors, and the upper elevations in the northern and eastern portion of the County. It should be noted that there are many small priority habitat areas (notably wetlands) interspersed throughout the County that are too small to map at this scale.

Concerns in the coastal areas are primarily related to seabird colonies, estuarine habitat, eagle, peregrine, and shorebirds (heron, etc.). Concerns in river areas focus upon priority riparian habitat, harlequin duck habitat, eagles and osprey. Concerns in upland areas focus upon bats, elk, grizzly and wolf.



**Figure 5.2**  
**Concentration of Priority Habitats and Species**  
**Skagit County, WA**

Figure 5.3 shows major land ownerships in Skagit County. A comparison of the two figures shows much of the priority habitat lying outside the large blocks of public land in Skagit County, notably the river corridors, and areas on the valley floor.



**Figure 5.3**  
**Major Land Ownership**  
**Skagit County, WA**

One PHS designation is especially relevant to requirements under the WWRP program. These are the areas outlined as UNOS (Urban Natural Open Space). Criteria for these areas are as follows:

*A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding, - and/or the open space functions as a corridor connecting other priority habitat areas, especially those that would otherwise be isolated, - and/or the open space is an isolated remnant of natural habitat larger than 10 acres and is surrounded by urban development. Local considerations may be given to open space areas smaller than 10 acres.*

## HABITAT PROTECTION MECHANISMS

There are a wide variety of regulations and programs active in Skagit County that relate to habitat protection, including:

- County GMA requirements for designating Critical Areas
- WDFW Priority Habitats and Species Program
- WDFW Bald Eagle Protection Rules
- Washington Endangered Species Program
- Requirements for Hydraulic Permits for projects affecting streams
- Forest Practices Rules and Regulations
- Wetland fill permit requirements under the Clean Water Act
- Shoreline Management Act Designations
- Project review requirements under the State Environmental Policy Act
- Required minimum stream flow under the Minimum Water Flows and Levels Act
- Efforts of the Puget Sound Partnership

In addition to these programs, a variety of agencies and private groups are moving to protect resources and habitat in Skagit County. Approximately 160 miles (almost 35,000 acres) of the Skagit, Sauk, Cascade and Suiattle Rivers are included in the National Wild and Scenic Rivers System. Portions of two Wilderness Areas and one National Park are within Skagit County. Washington State Parks and Washington Department of Natural Resources have lands in Skagit County that are maintained primarily for their open space and conservation values. The Padilla Bay National Estuarine Reserve covers 10,800 acres of Skagit County bay lands and uplands.

The Nature Conservancy, Washington State Department of Fish and Wildlife, US Forest Service, and Washington State Parks have purchased lands in the upper Skagit River corridor for bald eagle habitat. These purchases total about 6,000 acres. Seattle City Light recently purchased lands along the Nooksack and Illabot drainages for purposes of wildlife conservation. These conservation ownerships are all in addition to open space lands managed by the County and local agencies that provide wildlife and recreation habitat. Additional open space areas are proposed in County Growth Management Act (GMA) planning, and the County has designated "critical areas" for wildlife habitat under their GMA planning requirements.

Existing and proposed open space and conservation areas are shown on Table 5.3. These are areas where conservation of natural resources is the primary emphasis, and public access is carefully managed. For existing protected areas, acreages and ownerships are shown in Table 5.3. As shown, there are currently over 300,000 acres of public protected areas in Skagit County or about one-quarter of the County land base. This does not include privately owned parcels

within the Wild and Scenic River Corridors or non-wilderness National Forest lands, nor does it include any trust conservation easement lands.

**Table 5.7**  
**Existing Conservation Areas**  
**Skagit County, WA**

<b>Area</b>	<b>Managing Agency</b>	<b>Acres Approx.</b>
Chuckanut Mountain	Department of Natural Resources/ Washington State Parks	3,980
Cypress Island Conservation Area	Department of Natural Resources	3,933
Hat Island	Department of Natural Resources	115.20
Fidalgo Bay Aquatic Reserves	Department of Natural Resources	700
Mary Leach Natural Area	Department of Natural Resources	30.70
Blanchard Forest	Department of Natural Resources	4,800
Hope Island State Park	Washington State Parks	12.50
Saddlebag Island State Park	Washington State Parks	23.20
Kukutali Preserve	Washington State Parks	96
Glacier Peak Wilderness Area (portion)	United States Forest Service	117,417
Noisy Diobsud Wilderness Area (portion)	United States Forest Service	6,476.80
Mt. Erie/Cranberry/Heart/Whistle Lake Complex	City of Anacortes	2,808.20
Cap Sante Park	City of Anacortes	37
Nooksack Elk Habit	Seattle City Light	3,240
North Cascades National Park	National Park Service	14,016.50
Padilla Bay Reserve	Washington Department of Ecology/ Nat. Oceanic and Atmospheric Admin.	10,800.00
Pilchuck Tree Farm	Skagit County	81
Frailey Mt Park	Skagit County	400
Sharpe Park/Montgomery-Duban Headlands	Skagit County	115
Northern State Recreation Area (portion)	Skagit County	726
Nichols Sandbar	Skagit County	33
Minkler Lake	Skagit Land Trust	128
Pressentin Park	Skagit County	75
Cumberland Creek	Skagit Land Trust	195
Guemes Mountain	Skagit Land Trust	70
Hurn Field and Forest Property	Skagit Land Trust	64
Skagit Bald Eagle Habitat	The Nature Conservancy/Washington Dept. of Fish and Wildlife/United States Forest Service/WSParks Seattle City Light	6,000.00*
Skagit Wildlife Area ( includes Wley/Deepwater Sloughs)	Washington Dept. of Fish and Wildlife	16,000
Fisher Slough	The Nature Conservancy	60
<b>Total</b>		<b>192,433.10</b>

## PUBLIC PRIORITIES FOR WILDLIFE CONSERVATION

Information on public priorities for wildlife conservation came from several sources; national and state studies, and questions asked in the Parks and Recreation Survey and Community Workshops in the preparation of this plan. Pertinent information from these sources is provided below.

### **National and State Studies:**

Several studies have been prepared on public priorities for wildlife conservation. The national Wildlife Watchers Survey (intercept Research Corporation) reported the following findings related to wildlife viewing:

- Over 60% of respondents had, at some time in their lives, taken a trip to view, study or photograph wildlife.
- Of 12 choices, the top two preferred species to view were "large mammals" and "small mammals."
- 90% of Respondents consider nature trails or boardwalks to be the most useful site enhancements for viewing wildlife.
- 85% of respondents believed interpretive information is important to their wildlife viewing experience.

The Washington Department of Fish and Wildlife research project, Understanding People in Places, reported the following results:

- Many residents indicated that they consider the wildlife near their homes as enjoyable to have around (86.4%) and as a valuable opportunity for recreation (57.4%).
- Several counties, including Skagit, had a majority of voters in favor of more public access to land near their home.
- Large number of residents expressed a desire for increased numbers of certain local species (47.7% for elk; 40.9% for deer).
- A majority of residents in seven counties (Asotin, Columbia, Cowlitz, Franklin, Lewis, Pacific, and Skagit) wanted WDFW to work with private landowners to provide more access to local lands.
- Skagit County had the highest percentages of residents expressing support for the previously mentioned approach (57.7%).

~~The Nongame Wildlife Assessment Survey (Intercept Research Corporation), a survey of 1,000 Oregon residents reported the following results:~~

- ~~▪ Over 95% believed that society has a responsibility for preventing the extinction of wildlife.~~
- ~~▪ Respondents strongly favored an active government role in the prevention of wildlife endangerment, with 95% agreeing that government should attempt to save endangered species and 88% agreeing that government should make more of an effort to prevent species from becoming endangered.~~
- ~~▪ Over 80% of respondents could identify a species they believed was endangered.~~
- ~~▪ Over two-thirds of those surveyed favored tax exemptions for property owners who protect wildlife habitat.~~

### **2003 Park and Recreation Plan Survey and Workshops:**

Priorities for wildlife habitat areas were addressed in the Park and Recreation Survey. In general, recreational open space and natural area conservation concerns were secondary to more active recreation interests, but were consistently cited by some participants as being important. Residents of the more urban areas were more interested in conservation of open areas and natural features than residents of rural areas. Specific findings of the 2003 survey and workshops are listed below:

- 2% of respondents felt wildlife interpretive areas were one of the three most-needed recreation facilities or activities in Skagit County. Such facilities ranked 19th of 44 most-needed types of recreation areas or facilities.
- When asked what type of park area should have the highest priority in a County park system expansion, "protection of natural areas or open space" received the most first-choice votes.
- Of nine choices for expanded recreation programs, "nature and outdoor activities" ranked third, behind "teen programs" and "youth sports".
- Responses to what types of open space should be acquired were scored as follows:

**Table 5.4**  
**Open Space Responses to 1998 plan survey**

<b>Score</b>	<b>Response</b>
1,166	Scenic areas/vistas for quiet public enjoyment
920	Important wildlife or nature education areas that may have limited public access
817	River and stream corridors
657	Open lands to separate urban areas from each other and adjacent rural lands
452	Wetlands
381	The County should not require open space lands

**1998/2003 Survey Results:**

- "Wildlife watching" is the third most popular recreation activity in Skagit County (behind "walking for pleasure" and "beach activities"). "Nature walks" is the fifth most popular activity, and "bird-watching" is the eighth most popular activity.
- When asked which activities respondents preferred if facilities were available, "nature walks" ranked second, behind "walking for pleasure".
- Of those surveyed, 78% have spent time at a public seashore, lake or river.

**Community 1998 workshop results related to wildlife conservation were as follows:**

- "Open space and natural areas" tied for third most needed area or facility in the County-
- Nature trails ranked 5th (of 12) as the most needed type of trail in the County.
- When asked to rank 9 potential types of park and recreation improvements for Skagit County, "open space" ranked 5th.

**GOALS AND OBJECTIVES FOR FISH AND WILDLIFE HABITAT CONSERVATION**

Preservation of a well-functioning ecological system is the best overall approach to wildlife habitat conservation. Since urbanization fragments these systems, we must attempt to maintain important locations, important connections, and important habitat types (or "niches"). This requires cooperative efforts of a variety of agencies, notably those with jurisdiction over land use. The

Skagit County Department of Parks and Recreation is only one player in the effort required to conserve wildlife habitat in Skagit County.

The following goals and objectives take into account the habitat issues discussed in this Element, the jurisdictional bounds of the Skagit County Department of Parks and Recreation, and the opportunities provided through existing and proposed Department lands and programs.

**Goal 1:**

Incorporate potential fish and wildlife habitat enhancements into site development and redevelopment, where possible.

**Objective:**

1. Where increased wildlife use is compatible with site objectives, incorporate plantings, access controls, removal of barriers to fish passage, and other measures to enhance habitat.
2. Incorporate non-structural bank stabilization methods (e.g. plantings, buffer areas, etc.) into waterfront projects, where feasible and practical. Avoid use of riprap.

**Goal 2:**

Where relevant, the Department will coordinate with Washington State Department of Fish and Wildlife to develop and operate Department lands and facilities in accordance with management recommendations for Washington's Priority Habitats and Species.

**Objectives:**

- ~~1. Coordinate development of Pressentin and Howard Miller Steelhead Park areas with biologists to ensure maintenance of eagle habitat. Consider winter use restrictions, if necessary.~~
2. The department director should work with county natural resource employees to in addressing fish and wildlife habitat concerns. These county employees must keep up-to-date on WDFW projects and recommendations, and provide updates to the resource managers.
3. Skagit County recognizes that trail corridors can have high wildlife habitat impact potential and should coordinate trail planning and development with WDFW.

**Goal 3:**

Provide educational and interpretive opportunities on existing and proposed recreation and open space lands, focusing on ecological processes, fish and wildlife resources, viewing tips, and conservation strategies.

**Objectives:**

1. Provide improvements at County parks, recreational open space areas, and trails such as viewing blinds, interpretation, and access controls that will encourage non-obtrusive wildlife viewing and learning.
2. Maximize access to interpretive opportunities by providing barrier-free structures and areas where feasible.
3. Pursue ~~WWRP~~ funding for priority projects.

**Goal 4:**

Work with the County Planning Department to define and protect valuable fish and wildlife habitat resources.

**Objectives:**

1. Ensure the proposed recreation resource management areas are given careful consideration as valued open space and habitat areas in county-wide comprehensive plan updates.
- ~~2. Ensure WDFW identified Urban Natural Open Space areas are given careful consideration in throughout county planning processes.~~
3. The Department will consider the management of additional lands for combined fish and wildlife and recreation values, if funding is available.

**Goal 5:**

Work closely with current and potential providers of interpretive and environmental education opportunities to help ensure a comprehensive and effective offering of these programs throughout the County.

**Objectives:**

1. Continue to coordinate with the North Cascades Institute, the SCS Watershed Project, the USFS, Padilla Bay Reserve, and others regarding providing educational programs at SCPR and/or other facilities.

2. Ensure education and viewing areas at SCPR facilities are sized to accommodate class groups, and that parking areas can accommodate at least a small school bus or three passenger vans.
3. Encourage those offering existing and new excursions through the Department include information on wildlife, habitat, non-obtrusive viewing, and conservation efforts.

## **PROJECT LIST**

Table 5.4 presents a list of projects for potential WWRP grant applications. The overall approach in developing this list was to suggest projects that:

- Respond to the habitat conditions and concerns described above,
- Assist in focusing efforts and public attention on areas not already protected,
- Are consistent with public preferences for wildlife habitat conservation, and
- Contribute to enhancement of other related recreation opportunities.

Projects were limited to proposals allowed under the WWRP program (acquisition and development, with development limited to items such as fencing, interpretive or observation trails, interpretive signs or kiosks, restrooms, parking, and creation or enhancement of habitat). They were also chosen with regard to the selection criteria for urban wildlife habitat proposals, which are:

- Community support
- Immediacy of threat to the site uniqueness of the site
- Diversity of species using the site quality of the habitat
- Long-term viability of the site
- Presence of endangered, threatened, or sensitive species enhancement of existing public property
- Consistency with a local land use plan or a regional or state-wide recreational or resource plan educational and scientific value of the site
- Population of, and distance from, the nearest urban area proximity to other wildlife habitat potential for public use
- Potential for use by special needs populations

**Table 5.4**

### Potential Acquisition and Development Projects

Project	Recommended Action
Similk Bay Shoreline Access	Acquire uplands and tidelands/Develop for resource protection, public use and education.
Samish Bay Shoreline Access	Acquire uplands/Develop for resource protection; heavy public use discouraged along shoreline.
Trumpeter Swan Wildlife Viewing/ Education Area	Coordinate with other agencies to develop wildlife viewing at the Barney Lake Preserve
<del>Two-Bay Loop Trail Interpretation</del>	<del>Develop interpretive areas/Brochures for proposed Two-Bay Loop Trail (extension of Padilla Bay Trail)</del>
Swinomish Park Access and Interpretation	Develop additional shoreline access at proposed Swinomish Park expansion/Provide Interpretive Improvements
Pressentin Park	River access protection and improvements (stabilize banks, control use), conserve eagle habitat, provide education/view.
Howard Miller Steelhead Park	River access protection and improvements (see Pressentin)/Provide barrier-free interpretation and viewing/ Develop fish viewing station
Lake Shannon Improvements	Provide educational display on osprey and Loons
Conway Park	Rehabilitate site to control shoreline access and enhance habitat/interpretive improvements
Pilchuck Forest Trail and Open Space	Develop interpretive boardwalk/Brochures and assist state and local agencies with stream rehabilitation
Northern State Recreational Area	Develop interpretive boardwalk/brochures with an observation platform along the wetlands. Develop educational/interpretive center. Fish habitat restoration.