PART VI

BELLINGHAM WILDLIFE and HABITAT PLAN

WILDLIFE HABITAT PLAN

INTRODUCTION

The presence of wildlife in and around Bellingham is an important feature of the area and an integral part of the City's livability. No other comparable City in Western Washington harbors the rich habitat and abundant wildlife as Bellingham. From viable native salmon returns of the Chuckanut, to peregrine falcons hunting over downtown and beaver lodges along the Squalicum, Bellingham has reason to be proud of its wildlife heritage. The Wildlife Habitat Plan provides a non-regulatory guideline for the conservation and future enhancement of this natural heritage, including native fish, wildlife and their habitat throughout the City of Bellingham.

The most important element of the plan is to foster sound stewardship of the City's living resources. This will be achieved through enhanced cooperation, communication and conservation action. The plan will provide the means for City government, personnel, neighborhoods, businesses and citizens to work together toward a greater understanding and appreciation of our wildlife community. The Wildlife Habitat Plan is compatible with existing City policies and regulations.

Adoption of this plan will enable the City to comply with the wildlife requirements of the Growth Management Act and qualify for Urban Wildlife Habitat Account funding through the Washington Wildlife Recreation Program and other sources. The Plan also lists those significant habitat areas identified through the City's assessment process. By targeting these areas of significant habitat the City lays the foundation for long-term planning for habitat acquisition and protection necessary for the perpetuation of viable wildlife populations.

PLAN GOALS AND OBJECTIVES

GOAL 1: PROTECT AND ENHANCE WILDLIFE HABITAT

Ensure a City-wide system of public and private open space which maintains or improves the quality of wildlife habitat in the City of Bellingham.

Objectives:

1. Preserve and acquire public open space in order to achieve a City-wide network of connected corridors and blocks of land as wildlife habitat.

2. Preserve wildlife habitat through a cooperative effort between the City, developers, and property owners prior to and during the review process for subdivision, planned contracts and shoreline, wetland/stream and clearing permits issued by the City of Bellingham.

3. Preserve existing vegetation in site planning, and where revegetation is required, utilize native plant landscaping in order to provide wildlife habitat to the greatest degree feasible.

4. Identify and protect a habitat base necessary to maintain current species diversity within the City and Urban Fringe, including native forests, particularly mature forest communities, fallow fields, wetlands, lakes, streams, shorelines, estuaries, marine areas, and any biologically unique plant communities.

5. Identify and protect Priority Habitats as defined by the Washington Department of Fish and Wildlife.

6. Enhance degraded habitats or viable linkages in fragmented habitats either by the property owner if it is a new development, the City if it is public land, or by voluntary action by a group or individual.

GOAL 2: PROTECT AND ENHANCE WILDLIFE HABITAT ALONG SHORELINES, INCLUDING MARINE WATERS AND FRESHWATER LAKES, PONDS, WETLANDS STREAMS AND RIPARIAN AREAS.

Protect and enhance water resources, recognizing them as among the most valuable wildlife resources in the City of Bellingham.

Objectives:

1. Develop a City-wide habitat network to include functional interconnected corridors which utilize riparian/stream corridors, ridgelines, upland reserves, wetlands, lakes, streams, and marine shorelines.

2. Continue preservation and management of regulated wetlands and streams in the City of Bellingham in accordance with Ordinance No. 10267 in order to achieve a no-net-loss, and overall increase of function and habitat value of these areas.

3. Preserve and restore riparian habitat along the City's major streams and significant tributaries, recognizing its value as habitat to fish and wildlife. Whenever possible improve salmonid habitat, and strive to establish the largest riparian corridor possible, recognizing that width, length and connectivity are critical factors for wildlife utilization and survival.

GOAL 3: PROTECT AND ENHANCE NATIVE WILDLIFE POPULATIONS

Protect and enhance wildlife populations in the City of Bellingham, especially those of local significance.

Objectives:

1. Adopt the Washington State Department of Fish and Wildlife's Priority Habitat and Species Program recommendations as guidelines.

2. Identify and maintain current species diversity within the City on a watershed basis.

3. Identify species of local significance for protective management consideration.

4. Maintain a wildlife inventory.

5. Refer to the Wildlife and Habitat Assessment in the land use planning process to determine where development and other land activities would best be located to protect wildlife populations.

6. Acquire or otherwise preserve significant parcels, as identified in the Wildlife and Habitat Assessment, that support native wildlife.

7. Develop incentives for private property owners to preserve habitat through conservation easements, dedication, or other mutually beneficial mechanisms.

8. Adopt a policy for wildlife protection in the City and coordinate enforcement with City, county and state officials.

9. Maintain a no hunting/trapping policy within the City and extend it to developed Urban Fringe areas.

GOAL 4: DEVELOP AND IMPLEMENT A WILDLIFE PROGRAM CONTAINING TECHNICAL AND EDUCATIONAL COMPONENTS

Develop a Wildlife Program to include City staff and volunteers in an effort to best maximize existing local resources.

Objectives:

1. Appoint a wildlife program specialist to coordinate and manage wildlife resources in the City. The specialist would serve as a technical and educational resource and coordinate City wildlife management, education, conservation and enhancement projects.

The specialist would build public-private partnerships for wildlife protection and enhancement, and serve as liaison to other resource agencies.

TECHNICAL

2. Maintain a City habitat/wildlife database with baseline, inventory, and current monitoring information. Add to the database when land is annexed to the City.

3. Provide wildlife planning and management expertise for citizens, businesses, and for projects requiring City approval.

4. Coordinate with Parks & Recreation and Planning and Community Development Departments in the acquisition of land for wildlife habitat.

EDUCATIONAL

5. Promote volunteer involvement and participation in wildlife program and projects.

6. Develop educational workshops for City personnel, decision makers, schools and the general public.

7. Encourage individuals and neighborhoods to develop and maintain backyard sanctuaries. Demonstrate to and encourage developers, schools and public facilities to landscape for wildlife whenever possible.

GOAL 5: ADOPT POLICIES THAT FACILITATE WILDLIFE AND HABITAT PROTECTION AND ENHANCEMENT

Adopt new policies and use existing ones that aim to protect and enhance wildlife and habitat in the City of Bellingham.

Objectives:

1. Designate a responsible City division or department to manage wildlife resources and oversee the Wildlife Program.

2. Implement a standard method of wildlife and habitat assessment when reviewing land use proposals. The Rapid Wildlife and Habitat Inventory Process (RWHIP) is recommended for its cost efficiency and reliable results.

3. Integrate Habitat Conservation Goals and Objectives with open space and Greenway plans to further protect viable habitat areas and functional corridors.

4. Establish an acquisition fund for the purchase of habitat. These funds are needed for fee simple acquisitions and for the purchase of easements or development rights and can be used as matching funds for Washington Wildlife Recreation Program grants.

5. Promote interdepartmental and interagency cooperation to protect wildlife.

6. Establish a system of project review whereby City staff with expertise in wildlife can advise on project designs or make recommendations to other City departments in order to protect or enhance wildlife and habitat.

7. Integrate street tree and other landscaping requirements with parks and open spaces landscape recommendations to increase the value of wildlife habitat.

SIGNIFICANT HABITAT CONSERVATION AREAS

Significant habitat conservation areas were identified through a City-wide wildlife and habitat assessment process. The assessment was based on existing information, aerial photo interpretation, expert testimony and limited field observation (see *Inventory by Watershed*).

The significant habitats of the City consist of both protected and non-protected areas. Recommended areas for protection, conservation or enhancement are identified within the text below. A map (Figure 11) illustrates these areas. This list is the most comprehensive at this point in time, however as new information becomes available, the importance of certain areas may be enhanced, and additional areas will likely be identified. For most habitat areas within the City species specific inventory data is lacking. With the application of more detailed information, the identification and protection of the most significant sites could be achieved with the necessary supporting data. In order to proceed with conservation planning and action, further study of the proposed protected areas should include: wildlife species occurrence, seasonality, habitat characteristics, conditions, land ownership and regulatory limitations.

Following are those areas identified as significant habitats within the City.

Chuckanut Creek: The total length extending outside of the City and major tributaries needs protection to maintain water quality and sustain present native fish and wildlife communities. This includes in-stream habitat, riparian areas and upland interface where possible. A portion of the stream is protected through Arroyo Park. Stormwater runoff from I-5 needs evaluation. Chuckanut is the most viable salmon stream in the City and harbors the greatest potential for enhancement to fully restore native salmon and steelhead populations. Attributes include: in-stream and riparian habitat is relatively intact and water quality good, riparian and upland habitat corridors, presence of species of concern and locally significant species, wildlife species richness, bald eagle roost, anadromous and resident fish populations, the only City stream with returning native salmon fish stocks.

Chuckanut Bay: The total area of the bay and its shoreline needs protection in and outside the City. The inner Bay and Clark's Point are currently protected. Recreational boating activities are causing disturbance to wildlife throughout the bay. Shoreline development is also encroaching on shoreline and near shore habitats. Water quality of residential runoff and creek input require monitoring. Attributes include: the largest estuarine habitat area in the City, eelgrass meadow, rocky shore, shoreline cliffs, some forested shoreline with snags, inner bay marsh, species richness and diversity, resident endangered, threatened and candidate species, and species of local significance present.

Clark's Point: The Point is one of the most important habitat areas in the City. Under permanent protection by a conservation easement the Point is still inhabited by the Clark family, but its resources are protected under an conservation easement and monitored by the Whatcom County Land Trust. Although protected, threats remain including fire, overuse by the public, trash and disturbance to wildlife. Also, connectivity to the mainland is limited, with existing corridors reduced to the shoreline and a thin bluff-line corridor. Restricted access and corridor enhancement are needed. Attributes include: intact upland mature conifer forest with snags, natural shoreline habitat, shoreline cliffs, unique plant community, resident endangered, threatened and rare species, presence of species of concern and species of local significance, last remaining fully forested marine shoreline in the City.

Interurban 100 Acre Woods: The total area is significantly valuable habitat which is currently in the planning stages for a major residential development. Preservation of wetland and upland habitats, as well as the Interurban corridor are necessary for the function of this area to support current species composition, which require both wetland and terrestrial habitats. Attributes include: significant intact wetland/upland complex, the greatest diversity of amphibians in the City, species rich and abundant breeding and resident birds, red fox and other uncommon medium-small mammals, a Sitka spruce community (rare within the City), fawning areas, presence of species of concern and species of local significance, major corridor connecting Padden and Chuckanut watersheds.

Hoag Lake: The total lake area, adjacent forest and forested corridor to Interurban and possibly Padden Creek need protection from encroaching development. Attributes include: lacustrine habitat with emergent vegetation, intact riparian area and forested corridor, waterfowl, wood ducks, resident fish population.

Padden Creek: The total length of the creek is significant, from Lake Padden west to Bellingham Bay. The eastern segment of the creek is a particularly significant wildlife corridor and gorge habitat area of potential species richness and diversity with extensive contiguous upland mature forest,

and little disturbance. The western portion, although altered, remains a valuable riparian corridor and aquatic habitat feature where it remains exposed. Protection is afforded to segments through parks and greenways. Enhanced riparian habitat protection is needed. Water quality improvement is imperative. Future restoration of culverted sections is also advised. This re-opening of the stream course or recreating a new course would improve the stream for all wildlife. Attributes include: a major urban stream, aquatic and riparian habitat, sections of multi-layered forest habitat abundant and diverse bird occurrence, valuable raptor habitat, some resident and anadromous fish, on-going salmon enhancement projects, major corridor function.

Lower Padden Creek & Padden Lagoon: The total creek and lagoon area, associated wetland, riparian and immediate upland areas are valuable wildlife habitat and park. All of the creek area is protected as a park and greenway. The lagoon is currently undergoing vegetative restoration on the south side and needs further restoration on its north side. The gravel parking area adjacent to the creek corridor is of value as open habitat and should be reseeded in native grasses; this area serves as a very important buffer to this segment of stream. Attributes include: valuable wetland, stream and riparian habitat, estuarine lagoon, resident and anadromous fish, avian species rich area, occurrence of species of concern.

Padden Creek Gorge: The eastern segment of Padden Creek, located between Lake Padden and I-5 is a significant stream corridor, gorge and upland forested area. This is an extremely valuable contiguous habitat reserve area, with uplands, ridgeline and riparian corridor, which tie directly into the lake Padden Park open space. The gorge is a unique feature which is both undisturbed and a potentially species rich area given habitat structure and diversity. Attributes include: intact stream and riparian corridor, good water quality, unique gorge habitat feature with potential for unique associated species, large contiguous mature forest habitat area, species rich and diverse area. This area requires thorough biological study.

Lake Padden: The total lake area and adjacent uplands are significant habitat and protected as park/open space. The forested uplands constitute the largest protected open space area within the City. Recreational development around the lake includes golf course, ball fields, swimming area, shoreline picnic sites and play areas, which have altered the natural habitat and removed the once extensive marsh habitat. Restoration of portions of the lake's shoreline and riparian areas is needed. Expansion of the protected open space area should include needed habitat corridors, west along Padden gorge, north to Samish Hill and east to Galbraith Mountain. Attributes include: extensive contiguous mature conifer forest habitat, forested wetlands, snags, resident threatened (nesting)candidate and monitor species as well as species of local significance, full

complement of forest associated species (high diversity and richness), designated priority habitat, seasonal waterfowl concentrations, sensitive amphibian habitat (Our Lake).

Samish Hill: Significant hilltop forest habitat constituting one of the largest contiguous forested areas in the City extending into the County to the east. Targeted Greenway corridor and valuable habitat reserve area. Attributes include: contiguous forest and wetland habitat complexes, habitat bridge between two watersheds, head waters of Lincoln Creek, talus caves, wetland and forest wildlife communities including species of concern and species of local significance.

Sehome Arboretum: Total area protected with the exception of small peripheral lots which are needed in the reserve to maximize area. The Arboretum is a high priority area due to its isolation. It is in serious need of at least one functional habitat corridor connection to allow the immigration and emigration of individuals in order to perpetuate terrestrial wildlife populations. Attributes include: extensive mature forest reserve, species rich and abundant breeding and resident avian populations, roost locale for raptors, occurrence of species of concern, native plant reserve, past comprehensive inventory data available.

Connelly Creek: The creek corridor and associated open space forms a partially protected reserve and corridor area extending from the base of Sehome Hill south to Padden Creek. The Connelly Creek Natural Areas constitutes the core of the reserve, with a significant area of open space remaining unprotected. Attributes include: the second most significant fallow field habitat areas in the City, one of two known native Sitka spruce communities in the City, natural stream corridor with on-going fish enhancement projects, diverse avian species, frequent raptor utilization and possible nesting, coyote denning and abundant small mammals, occurrence of species of concern.

Lake Whatcom: Largest natural lake in Whatcom County and extensive freshwater habitat with historical accounts of avian abundance and richness. Tributaries to the lake are utilized for spawning by cut throat trout and kokanee. Preservation and restoration of these vital stream habitat areas is critical. Development of the lake's shoreline, loss of shoreline marshes, riparian habitat and use by recreational boaters and jet ski's has likely contributed to the decline in wildlife occurrence around the lake. However, with the year-round presence of common loon and possible nesting of this species may represent remnants of historical populations. The lake and shoreline requires further wildlife inventory, monitoring and conservation of sensitive areas. Restoration of the lakes' shoreline vegetation was identified as a priority enhancement area. Maintenance of the Lake's water quality is vital to both human and wildlife health.

Silver Beach Creek: A tributary to north Lake Whatcom, containing valuable in-stream and riparian habitat. Good fish habitat and spawning habitat. Valuable lake-riparian-upland habitat linkage and corridor.

Geneva Creek: Outside City boundary, but included in the Bellingham Parks and Open Space Plan due to its ownership by County Parks. A tributary to Lake Whatcom with intact riparian habitat and adjacent upland cover. Valuable lake-upland corridor in need of protection upstream from park boundary in order to maintain corridor function and habitat value overall. Bald eagles are observed here regularly during winter.

Scudder Pond: Lake-side marsh, lake out-fall and head of the Whatcom Creek corridor. The marsh is protected in part and held in ownership by North Cascades Audubon Society. Important and uncommon wetland habitat with a resident beaver population, abundant bird life including threatened and locally significant species. Open space or vacant lots adjacent to the wetland and stream corridor, particularly where bald eagles are currently nesting, need protection.

Whatcom Creek: From Lake Whatcom west to Bellingham Bay, Whatcom Creek is in need of in-stream and riparian restoration, enhancement and protection. A segment of the creek from the lake through Whatcom Falls Park is protected from development but has suffered cumulative impacts by recreationalists. Whatcom Creek has the potential to be a wildlife show-piece for the City if the return and perpetuation of native species is the guiding principle applied in the restoration and development of this corridor. Greater riparian buffers, revegetation with native species and trees, de-channelization, spawning area creation (side channels) and storm water abatement is needed to maximize the creek's habitat quality and function. Attributes include: a stream corridor utilized regularly by aquatic, semi-aquatic and avian species, including threatened, endangered and monitor species, anadromous and resident fish populations, presence of a significant associated wetland (largest in the City), associated large mature forested area, unique gorge habitat, existing riparian area with a high degree of restorative potential, and a high quality natural feature in the heart of the City.

Park and Hannah Creeks: The upper Hannah Creek watershed is an intact unprotected forest reserve spanning hundreds of acres and extending into the Lake Whatcom watershed and south into the Padden Watershed. This forested upper watershed area is critically important in the maintenance of water quality downstream, air quality and genetic diversity within the City. Protection of a substantial contiguous area is needed to maintain the forest community. Attributes include: a large mature forest reserve and associated wildlife community, stream/riparian corridor, good water quality, ridgeline corridor, abundant snags and large stumps, abundant pileated woodpeckers, species rich area, excellent connectivity.

Cemetery Creek: The upper Cemetery Creek watershed is an extensive forest reserve contiguous with the higher elevation headwaters of Lincoln, Park and Hannah Creeks. This forested upper watershed is critically important to downstream water quality and stream conditions. As the upper-middle watershed becomes more developed, water quality has been degraded and higher peak flows have resulted in scouring and erosion downstream. North of Lakeway Drive both the east and west forks of Cemetery Creek flow through forested corridors. The east fork flows through Bayview Cemetery with narrow riparian cover, but the west fork flows through a wide forested corridor which was established when the adjacent subdivisions were approved. The two forks converge near the confluence with Whatcom Creek. Upstream of this spread out in braided channels which are part of an undisturbed forested wetland system. An 11 acre development near the E. fork of Cemetery Creek will likely result in construction of an east-west connector road (Fraser Street) bisecting this otherwise continuous corridor.

In addition to the attributes listed for Hannah, Cemetery Creeks lower reaches are in relatively good condition, it provides braided channels, good fish habitat, forested wetlands with mixed deciduous/coniferous cover and provides a corridor to the upper forested watershed and Whatcom Creek which if restored and expanded would serve as an important wildlife linkage between the Whatcom Falls forest reserve and the upper watershed.

Lincoln Creek: Upper Lincoln Creek ties into the expansive Samish Hill forest reserve. This is an important natural area necessary to maintain water quality of Lincoln Creek and support resident and anadromous fish populations as well as providing a corridor for wildlife. The mouth of Lincoln Creek provides an important spawning area and refugia for resident fish.

Railroad Trail Greenway: A Greenway trail corridor extending from I-5 to Whatcom Falls Park serves as one of the few remaining open space features in the more densely developed older neighborhoods. While much of the trail is surrounded by streets and homes, it is narrowly lined with trees in parts and flanked by City acquired open space in others. The trail, although only a narrow corridor in some areas, has associated open water and forested wetlands, fallow fields, forests and potential for acquisition of additional open space. The trail passes Roosevelt Elementary School and over the Fever Creek Detention Dam. The detention basin was converted to 1.75 acres of open water wetland and 1.5 acres of vegetated upland now known as the Fever Creek Wildlife Pond. There Fever Creek flows through the adjacent forest and is partially diverted into the pond. A 3.5 acre forested wetland to the south of the trail in this vicinity was dedicated to the City but development proposals threaten to diminish the surrounding open space. Native trees and shrubs should be retained and augmented as buffers to this trail corridor.

The corridor extending north from Whatcom Falls Park, is the only north-south habitat corridor in the City. Development adjacent to the corridor threatens to severely limit it function and value for wildlife. Greater protection and expansion of this corridor is needed and should be a priority area. Attributes include: proximity to Roosevelt Elementary School, City ownership, Fever Creek Wildlife Pond and associated uplands, connection with Greenways on Alabama Hill and to Whatcom Falls Park.

Squalicum Creek: The total creek area and undeveloped floodplain provides the most significant habitat within the Squalicum Watershed. This riparian/fallow field/forest habitat extends northeast linking into Dewey Valley and north to King Mountain, forming an extensive and diverse habitat area. Attributes include: anadromous and resident fish populations, good riparian and some spawning habitat, viable and active beaver complex, extensive fallow field/wet meadow habitat, common snipe breeding areas, upland mature forest blocks, safe passage under I-5, avian species diversity and richness, species of concern present.

Squalicum floodplain: The eastern segment of Squalicum Creek, up to and beyond the City boundary, is a valuable habitat area consisting of wet meadow, fallow field, shrub scrub and riparian habitat. With the exception of established parks, the area is zoned industrial. This are is a critical habitat link and needs immediate protection if Squalicum Creek is to continue as a salmon bearing stream and high quality wildlife corridor. Attributes include: the largest fallow field habitat area in the City, forested wetlands, wet meadow, riparian and shrub habitats, the only common snipe breeding site in the City, abundant small and medium mammals, vital corridor leading to county and uplands, raptor hunting area, avian diversity.

DNR lands: Identified in Bellingham Parks and Open Space Plan, these lands form a contiguous forest corridor northeast along the Squalicum Creek through the Dewey Valley. Important habitat reserve for the Squalicum Watershed.

Squalicum/Mt. Baker Uplands: Extensive forested area, currently undergoing major development. Important reserve area and habitat linkage from Whatcom Watershed to Squalicum Watershed. This area requires greater review and planning for wildlife corridors and habitat reserve.

Little Squalicum: Significant marine shoreline-upland habitat interface. Attributes include: natural area and park of early successional forest, shrub and riparian habitat; provides a natural corridor inland from shoreline; diverse avian species; species of concern include endangered, threatened and candidate species occurrence.

Marine Bluff: The historical marine shoreline bluff remains today as a relatively natural corridor parallelling the developed shoreline extending from north to south Bellingham. Although lacking formal protection, the bluff maintains a natural quality that could be enhanced for habitat and aesthetic value. Attributes include: connectivity, valuable habitat utilized by endangered, threatened and monitor species, diverse avian species, corridor function for a variety of small and medium mammals as well as deer, aesthetically pleasing open space in an urban area.

Bellingham Bay: The Bay harbors significant marine and shoreline habitats. The shallow shore and deep off shore waters provide valuable wintering habitat for some the largest concentrations of diving birds in Puget Sound. It also is habitat for year-round habitat for a variety of marine birds, shorebirds and mammals. Important marine migratory and resident fish populations. Abundant bivalve and crustacean. Endangered and threatened raptors frequently hunt or forage along shoreline area as do candidate species such as harlequin ducks. Water quality must be protected by treatment of stormwater runoff into the bay and enforcement of existing regulations governing industrial discharge and shoreline uses.