

**Illahee Preserve**  
(A Kitsap County Heritage Park)

**Stewardship Plan**

Prepared by the  
**Illahee Forest Stewardship Committee**

**July 2003**

# ILLAHEE PRESERVE STEWARDSHIP PLAN

---

## ACKNOWLEDGEMENTS

### **Kitsap County Board of County Commissioners**

Jan Angel, Chair  
Chris Endresen  
Patty Lent

### **Ilahaee Forest Stewardship Committee**

Brett Aho  
Elysa Aho  
Jim Aho  
Audrey Boyer  
Cynthia Brakstad  
David Hecker  
Cynthia Holben  
Irwin Krigsman  
Judy Krigsman  
Hugh Morris  
Frank Richmond  
Cathy Stensen  
Jim Trainer

### **Faithful Participants/Contributors**

Ann Lovell

### **Kitsap County Facilities, Parks and Recreation Department Staff**

Cris Gears, Director  
Rick Fackler, Park Planner  
Dori Leckner, Volunteer Coordinator  
Lucretia Robertson, Office Assistant

# ILLAHEE PRESERVE STEWARDSHIP PLAN

---

## Table of Contents

I. Executive Summary	1
II. Introduction	
a. Site Description	2
b. Statement of Intent	2
c. Illahee Forest History	3
III. Resource Inventory	
a. Geomorphology, Soils and Hydrology	11
b. Vegetation	12
c. Wildlife	13
IV. Management Plan	
a. General Recommendations	18
b. Area Specific Recommendations	18
1. Greenbelt	18
2. Old Growth Preserve	18
3. Illahee Creek Watershed	19
4. Active Use Park Area	20
5. Trail Area	21
6. Rolling Hills	21
7. Heart of the Park	22
c. Two-Year Priorities	22
d. Roles and Responsibilities	
1. Joint Responsibilities	23
2. Stewardship Committee	23
3. County Parks Department	24
Appendices	
I. Resolution Establishing Illahee Stewardship Committee	A-1
II. Vegetation of Illahee Preserve	A-2
III. Salmonid Habitat Analysis	A-3

# ILLAHEE PRESERVE STEWARDSHIP PLAN

---

## List of Figures

	<u>Figure/Title</u>	<u>Page No.</u>
Figure 1	Location Map	2
Figure 2	Vicinity Map	3
Figure 3	Oblique Aerial of Illahee Creek Watershed	4
Figure 4	Aerial of County-Owned Illahee Lands	5
Figure 5	High Elevation Aerial	6
Figure 6	Management Area Map	21

## I. Executive Summary

The Illahee Preserve is approximately 700 acres of public and private land of mostly pristine forest and primary watershed in an otherwise urban setting. For nearly 25 years local residents and county officials have sought to preserve portions of this unique area for future generations. In 2001 Kitsap County acquired from the Department of Natural Resources (DNR) 352 acres, the major portion of this area. In 2003 a stewardship committee was appointed by the county commissioners to determine the best use of the DNR land.

The stewardship committee expanded the vision to include the Illahee Creek watershed as integral to the preservation of the area. The watershed includes forest areas and the north and south tributaries of Illahee Creek. Plans are to solicit local residents, organizations, schools, businesses, government agencies and Indian tribes to help establish and develop this into a premiere nature preserve and park for the education and enjoyment of this and future generations.

The preserve will promote the Native American meaning of the word Illahee as "a place to rest" and will consist of:

- The virtually self-contained watershed, primarily in its natural state, which drains into Illahee Creek
- The only type II refugia salmon stream in an urban setting in the area, capable of supporting 4 species of the family salmonidae
- Old growth forest and wildlife preserve which contains old growth Douglas-Fir, Western White Pine, Western Hemlock and Western Red Cedar
- Interpretive walking and hiking trails for all ages primarily in the central and upper reaches of the watershed
- Perimeter bicycling routes and trails
- Future site-sensitive recreational areas (picnic areas, playgrounds, ball fields, etc.)

With plans for future acquisitions supporting:

- A future interpretive center
- A future educational salmon hatchery
- A "forest to sound" trail above Illahee Creek
- An existing community golf course

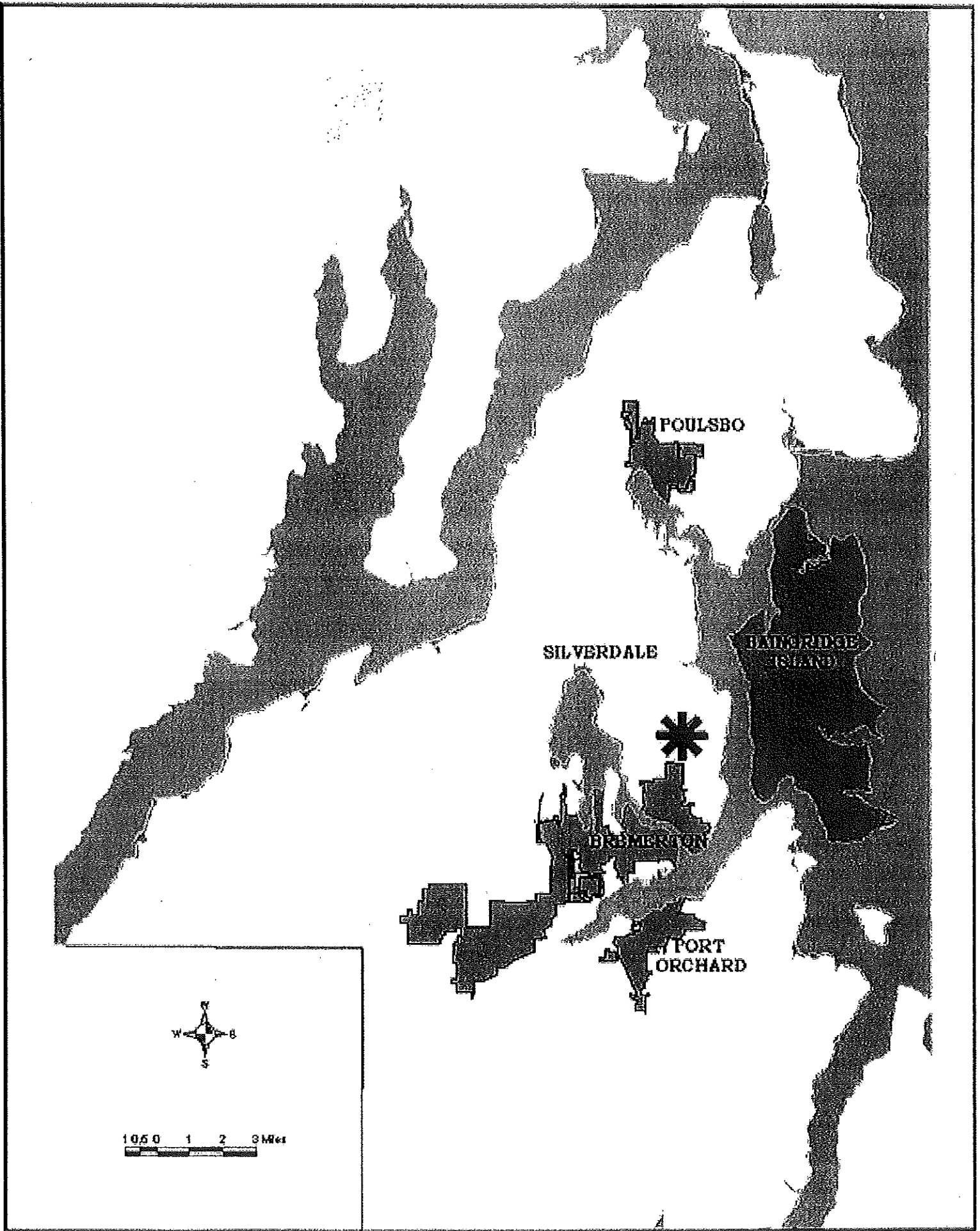
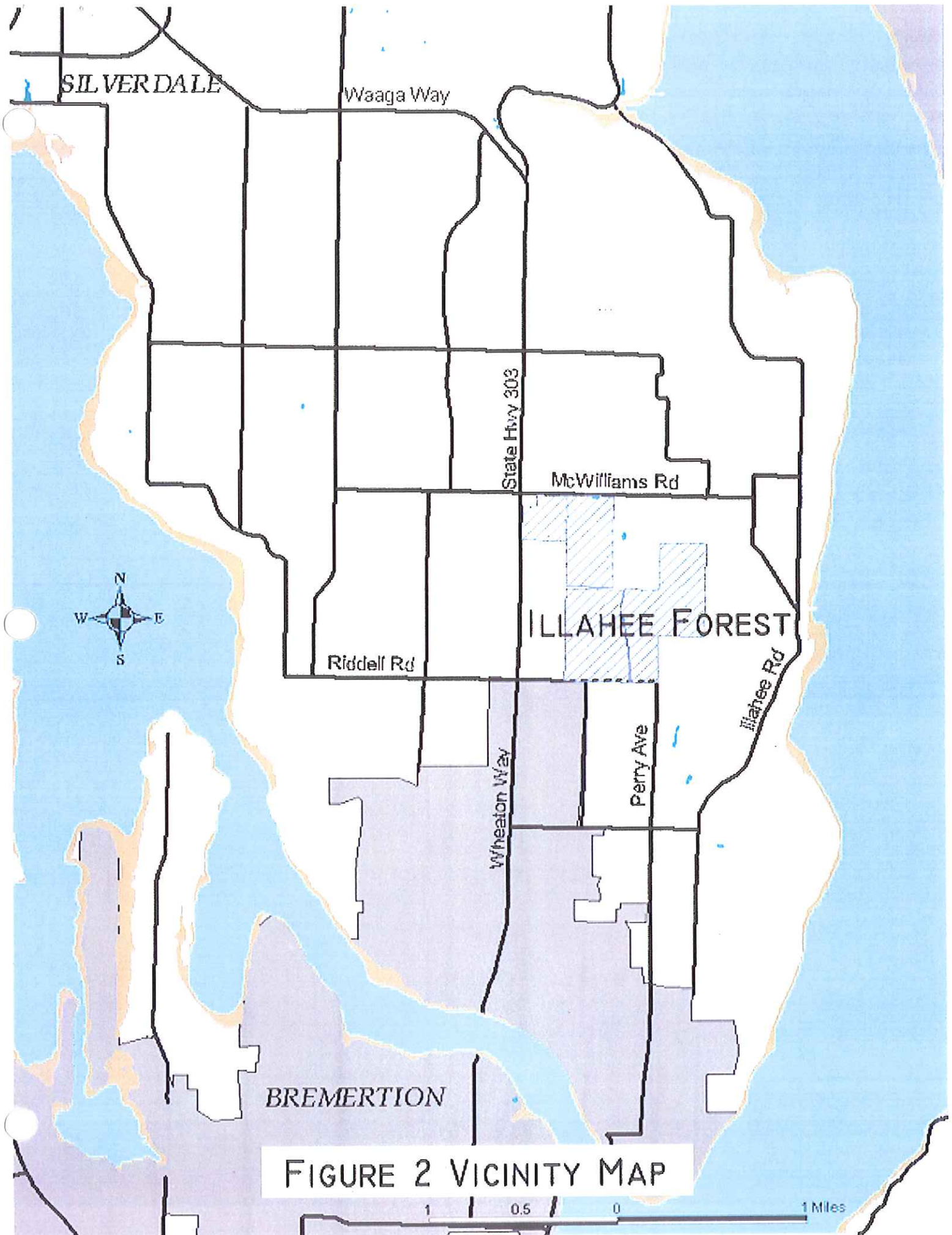


FIGURE 1 LOCATION MAP



SILVERDALE

Waaga Way

State Hwy 303

McWilliams Rd

ILLAHEE FOREST

Riddell Rd

Illahae Rd

Perry Ave

Wheaton Way

BREMERTION

FIGURE 2 VICINITY MAP

1 | 0.5 | 0 | 1 Miles



FIGURE 3 OBLIQUE AERIAL OF ILLAHEE WATERSHED



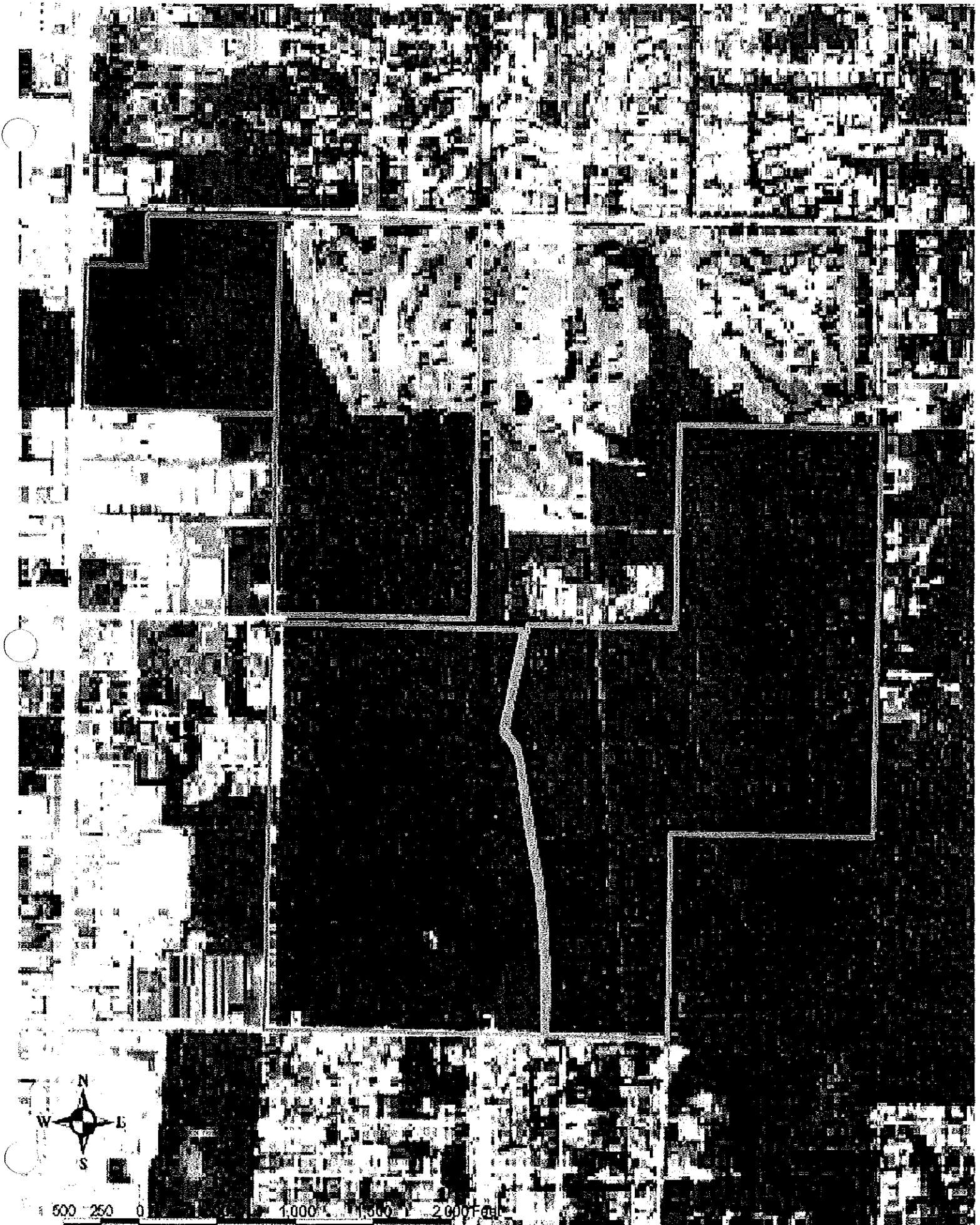


FIGURE 4 AERIAL OF COUNTY LANDS

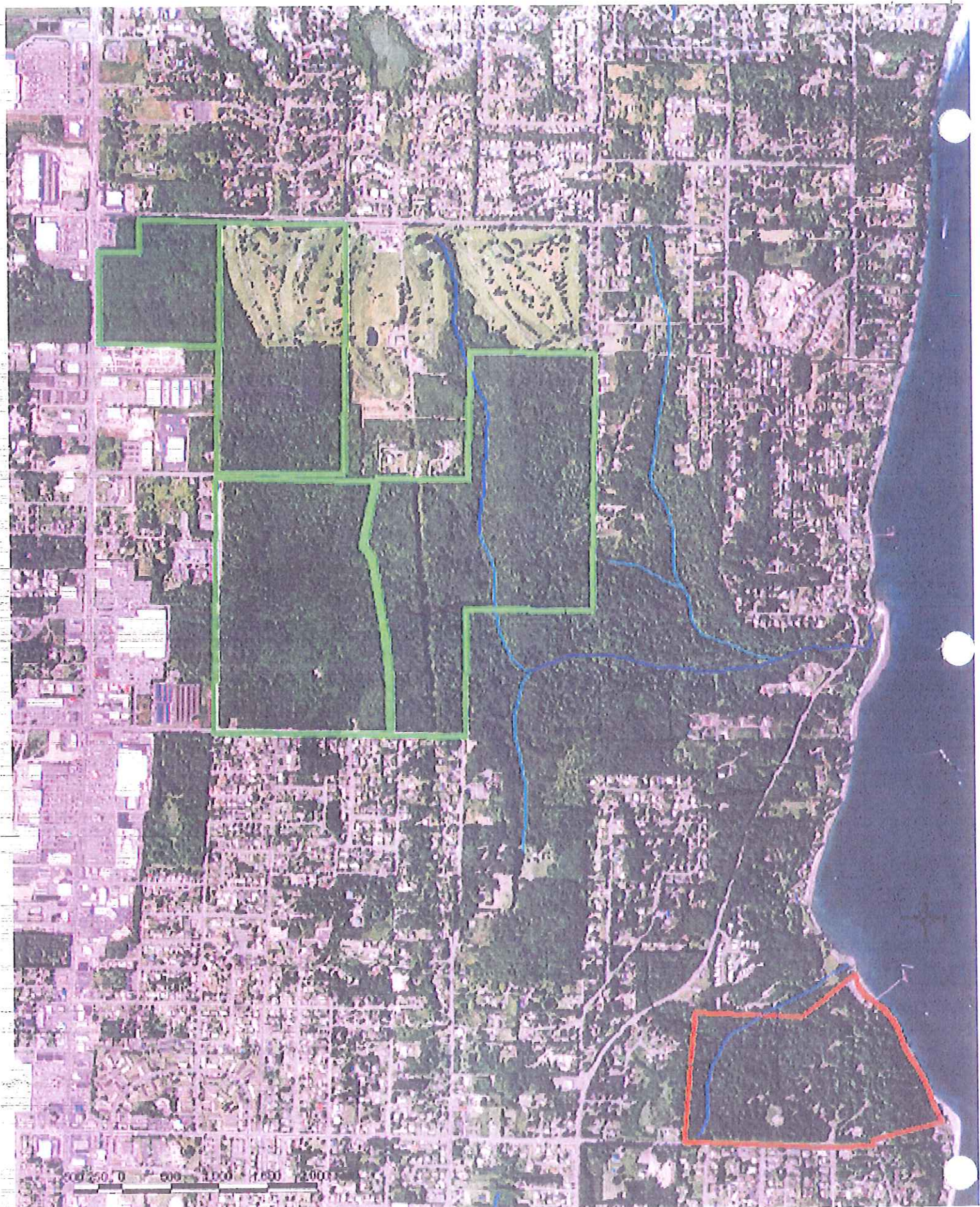


FIGURE 5 HIGH ELEVATION AERIAL

## II. Introduction

### a. Site Description

Illahee Preserve is located in the East Bremerton area of Kitsap County, generally just north of the Bremerton city limits. The Preserve includes 352.42 acres of property owned by Kitsap County (known commonly as Illahee Forest), as well as additional lands adjacent to the forest, including: undeveloped sections of the Illahee Creek riparian corridor; Rolling Hills Golf Course, which lies north of and adjacent to the County land; and, an in-holding of residential lots within the forest. These areas are noted in the following maps and are described in greater detail in the Management Plan Section of this document.

### b. Site Location and Maps

- Figure 1: Location map – large scale  
Figure 2: Location map – local  
Figure 3: Oblique aerial  
Figure 4: Illahee Creek Watershed – topos, streams, parcels, roads  
Figure 5: High Elevation Aerial – KC owned (green) others & proposed (yellow)



### c. Statement of Intent

To establish and develop a premiere nature preserve and park for the education and enjoyment of this and future generations.

To preserve to the greatest extent possible the natural character of Illahee forest lands and the Illahee creek watershed, including vegetation and wildlife habitat.

To provide limited appropriate active and passive recreational opportunities while maintaining sensitivity to the natural character of the sites.

To solicit the support and help of local residents, organizations, schools, businesses, government agencies, and Native American tribes to work together to carry out the vision and plans for the preserve.

To promote the Native American meaning of the word Illahee as a "place to rest."

### d. Illahee Forest History

In the distant past in what Native Americans called Illahee, "a place to rest," a forest of Douglas-Fir, Red Alder, Big Leaf Maple, and Western Red Cedar grew unfettered. Native Americans came to the place to relax. They walked the land, and trails were formed among the undergrowth of sword fern, salmonberry, and Oregon grape. Then a fire happened, by causes, unknown causes, that opened the canopy about 271 years ago (approximately 1732 ), allowing Western White Pine and Western Hemlock to sprout up among the more established species. Time passed and the forest recovered, and the natives returned to rest. Not too long thereafter immigrants came to the land, and homesteads were established. Then a 640 acre piece of this area became the Illahee Trust Land by federal decree. Next came timber companies, and "a place to rest" was "high-graded" in the mid-1920's. The smaller old growth Douglas-Fir went untouched and, by 2003, they reached the age of 270-plus years. Below this stand less fortunate trees were clear cut in the 1930's. A 68-year-old stand of Red Alder grew on that cleared land. Time passed and various efforts were undertaken to clear cut this forest and develop it for commercial and residential purposes. Citizens arose and lamented the possible loss of "a place to rest." They organized and after a 25 year campaign, they convinced farsighted government leaders and agencies to designate the land as park and preserve. A record of that struggle was recorded and is captured below.

The Illahee Trust Land came into being originally via the Federal Land Ordinance of 1785. The Continental Congress ordered that all new lands acquired by purchase or treaty be surveyed and divided into grid patterns of 36 sections of land, each section being 640 acres, or into divisions of six square miles called townships. The Land Ordinance of 1785 went on to decree that: "*There shall be reserved the lot No. 16, of every township, for the maintenance of public schools within the said townships.*" When the colonies formed a union and declared themselves the United States of America in 1789, the Federal Land Ordinance of 1785 continued as the principal land management vehicle.

It was over 100 years later before the State of Washington was created and the land act held, eventually giving the original 640 acres of Illahee Trust Land to the State for school construction purposes. The Commissioner of Lands of the State of Washington was responsible for all trust lands. The DNR (the Department of Natural Resources) was created eventually to manage these lands on behalf of the Commissioner of Lands for the benefit of schools. These lands have undergone many passages in the last hundred plus years since the State of Washington was formed. In an issue of *Columbia: The Magazine of Northwest History*, the Summer 2001 issue, Linda Byers attests to this journey in an essay titled "Forest Reserves vs Money for Schools." In this article Ms. Byers summarizes some of the battles that have taken place to keep intact the Trust Lands for Schools.

The Illahee Forest of Kitsap County has also undergone many changes since its original status as 640 acres of land. Over the years about 240 acres of it was sold for commercial or residential uses, the proceeds going to school construction. An additional 40 acres was leased to the Rolling Hills Golf Course. That lease expires in 2026. The remaining 360 acres contains a salmon stream and is heavily forested. A major feature is a stand of approximately 50 acres

## ILLAHEE PRESERVE STEWARDSHIP PLAN

---

of old growth conifers. They have been here since at least 1732. These trees were 53 years old when the Ordinance of 1785 was passed by the Continental Congress. These trees were 157 years old when the State of Washington was formed. And these trees will be there for a long time to come for the future generations of Kitsapans.

The first efforts to protect the remaining acres of the Illahee Forest started in 1978 and lasted into 1981. The DNR announced in late 1978 that the Illahee Trust Lands were going to be logged and that the land would be developed into 1200 housing units, including town houses and several six to eight story elevator apartment buildings. This announcement was the spark that ignited citizen activists to come to the rescue of the Illahee Forest.

Pat and Margaret Carey of the Sheridan Neighborhood Association immediately called for citizen attendance at DNR hearings on the disposal of the Trust Lands. Citizens from various neighborhoods began writing letters to the editor of the Bremerton Sun, decrying the push to log the forest and to build such high-density housing. Citizens crowded into the DNR hearings asking for alternatives to logging and development. The Bremerton Area Council of Neighborhoods under the leadership of President Glenn Vockrodt demanded that an Environmental Impact Statement be filed on the DNR's development proposal. The council also noted that increased population required increased open space and parks, and that the forest should be set aside for educational use by school districts in the county. Hearings were held in January 1979 at Esquire Hills Elementary School.

Practically all of 1979 saw encounters between the DNR and citizens' groups as in other areas. The Bremerton Sun reported on the many meetings that were held during that year. The DNR, charged with developing income for the schools from the land holdings, didn't give up their charge easily. The DNR hired a consulting firm in May 1979 to propose plans for the development of the Illahee Trust Land and to deal with the environmental impact issues and citizens; groups.

Pat and Margaret Carey of the Sheridan Neighborhood Association took action through their organization by: writing letters to the Kitsap County Commissioners; requesting the County to purchase the land for park use; writing to the consulting firm, hired by the DNR, inviting State Legislators to visit the Illahee Trust Land for guided tours of the property; writing letters to Bert Cole, the then Public Commissioner of Lands for the State of Washington; and writing to Joe Murphy. Pat Carey wrote a letter to Joe Murphy, the then Chairman of the Washington State Democratic Party, asking for assistance in turning the Trust Lands into a park. Pat Carey also spoke before the Bremerton City Council, asking them to become involved in the fate of the Illahee Trust Lands.

The Bremerton Council of Neighborhoods enlisted the Plumbers and Pipe Fitters, PSNS Local #631, to write to Bert Cole. They did so, asking for alternatives to logging and development. A citizens' group led a movement to create a Central Kitsap Parks District.

These actions went on non-stop throughout the summer and fall of 1979. Pat and Margaret Carey were veterans at preserving public lands for open space and park use. They had led the way in getting Blake Island so designated earlier. Many other citizens attended meetings, wrote letters to editors, and participated in leading tours of the Illahee Trust Land. The DNR had the charge of creating revenue from the land, but activists were aware that the original tract of land had been 640 acres. The acres sold from the original 640 acres had provided significant funds already for school construction.

Other developments continued during this first time period from late 1978 to summer of 1981. A market survey from a DNR consultant reported that between 1350 and 1670 housing units could be built on the 360 acres of Illahee Trust Land. This was an increase from the earlier 1200 units proposed. The report contained three scenarios-single family lots plus 330 apartment units and townhouses. The second proposal was for 800 townhouse units, 300 small lots for houses and 100 units in an elevator apartment building. The third proposal was for 600 units in a 25-story high rise and 600 more units in garden apartments and townhouses. Needless to say this last option caused a furor in the neighborhoods surrounding the Trust Land.

Counter proposals circulated in the coming months. The DNR suggested that Bremerton annex the Illahee Trust Land. The owner of the Rolling Hills Golf Course supported that annexation. Bert Cole proposed that the Kitsap County Commissioners consider purchasing the Trust Land. At a public meeting on January 16, 1980, Pat Carey asked Rep. Norm Dicks to seek federal funds to purchase the Trust Land as a park. Rep. Dicks promised to look into it. The League of Women voters of Kitsap County supported the idea of the County's purchase of the Trust Land for park purposes. Pat Carey attended the Bremerton Parks and Recreation Committee meeting at Sheridan Village Community Building. The committee agreed to support the purchase of the Illahee Trust Land for park purposes.

Citizens signed petitions to get the county to purchase the Illahee Trust Land for park purposes. Citizens also circulated petitions for signatures to place a measure on the November ballot to buy the land through a bond issue. The petitions didn't get the necessary 4500 signatures. On April 9, Pat Carey wrote to the Washington State Parks and Recreation Commission for a spot on their agenda for their April 1980 meeting in Bremerton.

And so the process continued, for this was a serious grass roots citizens' effort. Finally the DNR withdrew its proposals, but the suggestion by Pat Carey and Bert Cole that Kitsap County purchase the Trust Land was the first sign of the ultimate resolution to the issue. The political will, however, was not there during the ensuing seven years.

Because of the lack of resolution to this issue during this interim period, on February 18, 1987 a newspaper article appeared announcing the DNR's renewed intention to log the trees and sell the land of the Illahee Trust Land within six months for development purposes. On March 26, 1987 a new group entered the dispute. The Illahee Trust Land Committee was formed to oppose logging and development of the Illahee Trust Lands. This group was formed largely of citizens who lived just south of the Trust Land. Members of this group and many other citizens wrote letters to the editor opposing the sale of the land. Olav and Cynthia Brakstad led the charge with incisive letters throughout the period. Ken Martin wrote a series of columns for the Bremerton Sun that asked penetrating questions regarding the issues of development and preservation. A succession of leaders headed this committee including Steve Davies, Brooks Synder, Orville White, and Steve Rodgers. This period of confrontation lasted from 1987-1989.

The first action of the Illahee Trust Land Committee was to request a 2-year moratorium on the proposed logging of the Illahee Trust Land. The request was sent to Brian Boyle, the new commissioner of Public Lands. The Illahee Trust Land Committee sent a letter to the Dept. of Fisheries concerning the Illahee Trust Land salmon stream. Letters were written to local State Representatives. An effort was made by the committee to get a Parks and Recreation District on the ballot once again. Three other earlier participants in the struggle to save the Illahee Trust land for park purposes came back into the fray. The Sheridan Neighborhood Association, the Bremerton Area Council of Neighborhoods, and the League of Women voters

organized meetings, passed around petitions, and wrote letters to Brian Boyle, the County Commissioners, and other political representatives. Prominent figures in this joint effort were Pat and Margaret Carey. These groups were digging in for another long campaign to save the forest.

Another direction that the Illahee Trust Land Committee took was to involve various environmental groups. David Hecker had a hand in this effort. He contacted the local Chapter of the Audubon Society to do a survey of the bird life in the Illahee Trust Land. They agreed to include the Trust Land in their survey but because of migratory patterns of birds this would take at least nine months. He recruited Margaret Ashworth, a faculty member at Olympic College, to do a survey of the plant life in the Trust Land. She did so and produced a five-page listing of plants on the western two-thirds of the Trust Land. He contacted the Nature Conservancy to see if they would examine the Trust Land and purchase the property for preservation. He attended several regional meetings of The Nature Conservancy and wrote letters to state and national leaders of the organization. The Nature Conservancy investigated and made the decision not to purchase the land, but it succeeded in getting the Washington Natural Heritage Program to do a survey of the property.

This state funded program had money to purchase property for conservation. Rex Crawford, a plant ecologist who worked for the Washington Natural Heritage Program, did the survey and wrote the report which was completed by October 13, 1987. Since the old growth had been selectively harvested in the 1920's, the property didn't fit the criteria for conservation under the Natural Heritage Program. The report did, however, contain the following words: "This does not, however, lessen the value of the forest as a native environment in an increasingly urbanized landscape. As urbanization continues, these high graded old-growth stands will become more valuable as representatives of natural diversity. Since the stand is less than a mile from Illahee State Park and next to a golf course, the local community could gain by acquiring it as a natural park or an open space site. If recreation is the designated use for the site, the Douglas-Fir stand should be minimally developed."

There was another lull in the DNR effort to develop the Illahee Trust Land, but by 1996 it started another campaign to sell the property. A new group of citizens rose to meet this challenge from the DNR. The Illahee Community Club, led by Audrey Boyer and friends, assumed the stewardship of action to protect the Illahee Forest. This group met at Audrey Boyer's home in the community of Illahee. By then the political leadership was in place to make the dream that citizens had held for nearly 25 years come true. Audrey Boyer, Irwin and Judith Krigsman, and others attended meetings of the Kitsap County Commissioners, urging them to find a way to preserve the Illahee Forest for future generations, emphasizing the County's need for picnic areas, parks, and hiking trails. The DNR countered with a proposal to the County Commissioners to rezone the land from forest to an urban designation. This action would have driven the value of the land to higher and higher levels, making it impossible to purchase as recreational and preservation property.

The Washington State Legislature came to the rescue. In 2001 under the leadership of Frank Chopp, Speaker of the House, and with the support of Jennifer Belcher, the then Commissioner of Public Lands, the legislature created a Trust Land Transfer Program. Under this program Kitsap County, via the leadership of Charlotte Garrido, Chris Endresen, and Tim Botkin, purchased the Illahee Trust Land for \$3 million, using conservation futures, a portion of property tax funds. The trees on the property, valued at \$2 million, were purchased by the State, the trees transferred to Kitsap County with the land and the funds deposited to the State's School Trust Fund. Debbie Van Buren administered the trust land transfer for the DNR.

## ILLAHEE PRESERVE STEWARDSHIP PLAN

---

With the Illahee Forest finally free from development purposes, the next phase of the process to create a park and preserve started. Under the leadership of Irwin and Judith Krigsman, Jim Trainer, and Rick Fackler, planner for the Kitsap County Parks Department, citizens met to consider options for the forest. Meetings were held at the Log Cabin on property owned by the Krigsmans.

County Commissioner Patti Lent joined the group and suggested that the group apply for Stewardship Committee status. They did so, and on February 24, 2003, thirteen citizens (members of the Jim Aho family, Audrey Boyer, Cynthia Brakstad, David Hecker, Cynthia Holben, Irwin and Judith Krigsman, Hugh Morris, Frank Richmond, Cathy Stensen, and Jim Trainer) were appointed by Kitsap County. Their charge was to work with Kitsap County's Park Department to develop a master plan for uses and management of the property. Before that major goal could be approached, a few preliminary measures had to be undertaken.

The first order of business was to remove debris and many abandoned auto and pick-up truck bodies. Commissioner Lent found the funds and Dori Leckner, staff member of the Kitsap County Parks, arranged for the removal of trash and vehicle frames. The second order of business was to secure the park from squatters, motorized vehicles, paintball and wood cutting activities as well as vandalism. These objectives were accomplished through many avenues and involved law enforcement agencies. Another concern was the health of the property itself. Laura Boyle arranged for a visit by Steve Arno, a University of Montana forester who also happened to be her brother and former Kitsap County resident.

He joined a hike through the western half of the Illahee Forest. He pointed out significant features of the forest, especially the healthy stands of Western White Pine, and located trouble spots where potential forest fire hazard existed. He advised immediate action to curb extreme erosion that exists at the forest's boundary with the golf course. Finally the Illahee Stewardship Committee started on its master plan for the Illahee Forest. Ann Lovell joined the Committee and arranged for the use of a meeting room at the Kitsap Unitarian Universalist Fellowship property. Other meetings were held at the Kitsap Regional Library on Sylvan Way.

They met frequently and considered a wide range of possible uses for the forest. Preservation, education, and recreation topped the discussions. It was decided to designate the parts of the forest as old growth preserve, greenbelt, active use area, and trail area. Committees were formed to work on each area with timelines established for results. Comprehensive plans for each area were written and discussed as a whole and resulted in concrete plans for each section of the forest. Two-year priorities were proposed to fulfill the plans as laid out.

Long-range plans for acquisitions to extend the forest were also a part of the master plan deliberations. A parcel of land in the center of the forest that had originally been homestead land and subsequently developed as a small housing project was determined to be the first priority in acquisitions. Its eventual purchase would allow the building of an Environmental Interpretive Education Center. A second purchase would be lands held along the Illahee Creek outside the present boundaries of the forest. Securing these properties and/or establishing a conservation easement would allow several future developments: a "Forest to Sound" trail, salmon habitat preservation, and an educational salmon hatchery. The final purchase would be acquisition of the Rolling Hills Golf Course. Nearly one-third of it is now leased from the County, a lease that expires in 2026.



Thus concludes the history of the Illahee Trust Land and Forest up to mid-summer 2003. During that time Kitsap County Commissioners adopted the master plan as formulated by the Stewardship Committee and Kitsap Park staff. This action brought to conclusion a long process over a 25-year period.

Citizen activists, various conservation societies, federal and state government agencies, Kitsap County Commissioners, and a number of plant and forest specialists acted in a democratic process to secure a park and preserve for present and future generations of Kitsap County residents.

So more time will pass. If enlightened government officials and vigilant citizens work together to carry out the master plan, generation upon generation of youth, adults, and seniors will enjoy "a place to rest." The stand of old-growth trees will mark its 300th birthday and the stand of Red Alder will attain centennial status. Swordfern and salmonberry will continue to flourish. By and by the time may come when this place will become known as the "Central Park" of Kitsap County.



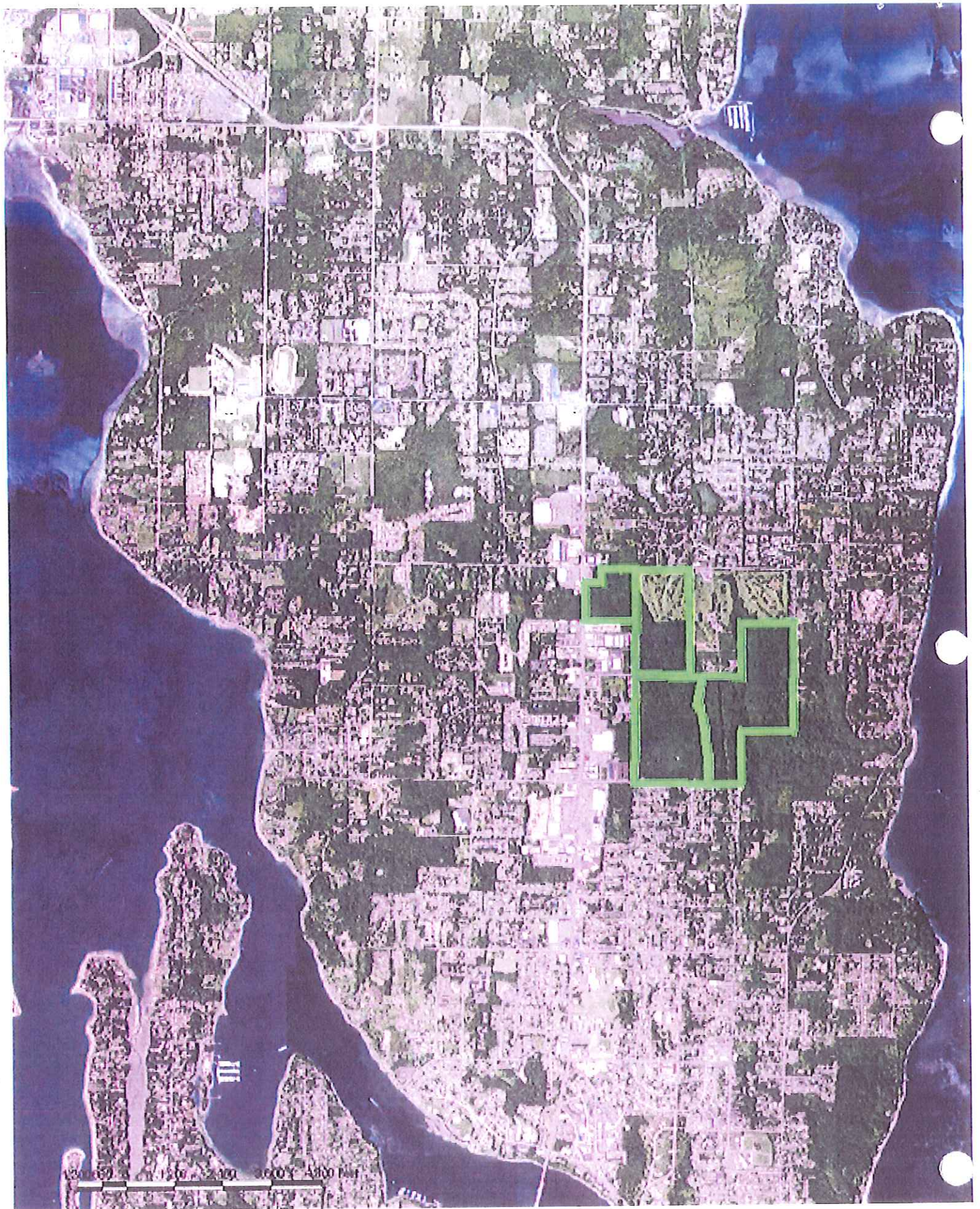


FIGURE 5 HIGH ELEVATION AERIAL

### III. Resource Inventory

Material provided by the Washington State Department of Natural Resources (DNR) provided the basis for most of what is written in this section of the Stewardship Plan. The DNR has extensively examined this site in the recent past, and we have been given reports written by hydrologists, wildlife biologists, botanists and foresters. Additional information provided by Dr. Christopher May addressing salmon habitat values of the stream has also been consolidated and reformatted with the DNR material to create this Resource Inventory.

#### a. Geomorphology, Soils and Hydrology

Eleven thousand years ago, at the end of the most recent episode of continental glaciation in North America, there was a sheet of ice more than a mile thick over Kitsap County. That ice sheet was littered with rocks, gravel, sand and silt that it had scoured and collected in its travels from the north and from the mountains surrounding the Puget Trough. As the glacier melted, the earth has been relieved of the weight of that ice, and has been rising relative to sea level. That "rebound" phenomenon is responsible for the steep ravines with unstable slopes within which many of the streams of Kitsap County, including Illahee Creek, are entrenched. The earth is rising at a rate with which the streams are yet unable to reach equilibrium. Given time, erosion by the streams and gravity will result in valleys with much gentler slopes, but not for thousands of years.

As the continental glacier melted over Kitsap County, the material carried by the ice was deposited like a blanket over the landscape. That material, mostly an unsorted mixture of clay silts, sand and rocks of varying sizes formed a layer called till over the underlying rock formations. The till, having a clay matrix, is a hard, impermeable layer, resistant to infiltration of water. This is the material upon which the soils of Illahee Forest are and have been accumulating since the last glaciers melted. The soils of the forest that lay over that till are relatively coarse and porous.

Rainwater that makes its way to the ground and is in excess of what the soil can absorb filters down through the soil to the impermeable till layer. It then flows laterally until it emerges in springs or stream channels.

Clearing of vegetation or disturbance of the soil can alter this hydrologic process. Development of impermeable surfaces such as roads, driveways and building roofs reduces the amount of precipitation infiltrating into the soil. That water enters the surface water features - by pipe or over the hard surfaces, rather than by the slower route through the soil. This water also carries more pollutants directly into the streams, as they are not filtered out by the soils.

When there is a storm with heavy rainfall, land that has been cleared or developed with impermeable surfaces contributes that storm water to the stream

more quickly than if it were filtering through the soil. That increased water flows with greater energy, scouring the stream bottom and banks, causing both erosion of the banks, and increased sedimentation downstream, when the water slows and no longer has the energy to carry the sediments.

Over one third of the Illahee Creek watershed has been developed for residential use or roads, particularly that part south of McWilliams Road. Calculations by Washington State Department of Natural Resources (DNR) hydrologists estimate that that development increases the volume of water in the stream by more than 50 percent during a storm of a size that occurs once every two years. The impact of development on the volume of water in the stream is less for larger storms, but even a storm of a magnitude that would statistically occur once in 100 years would have twenty-five percent more water flowing during the storm as a result of the roads and residences developed in the watershed. While very little of that development is within Illahee Preserve, the impacts to that portion of the creek that traverses the forest are evident. There are landslides occurring on the steep hillsides along the creek through the forest, where the raging storm water undercuts the banks. Tons of sediment generated by this erosion have been deposited downstream near Illahee Road, where the stream gradient levels. These sediments cover gravel streambeds, degrading their habitat value for fish. Another significant storm water problem is where storm water collected by Rolling Hills Golf Course is discharged directly into the northwest part of the forest. The volume of water flowing from two pipes is causing severe erosion (and subsequent downstream deposition) problems in that part of the forest.

### **b. Vegetation**

Most of the 352.42-acre Illahee Preserve property acquired by Kitsap County from DNR is forested with vegetation typical of this region - a mixture of coniferous and deciduous trees including Douglas-Fir, Western Hemlock, Western White Pine, Western Red Cedar, Red Alder, Maple and Madrona. Logging has occurred over the entire site at different times in the past 150 years, but not within the last thirty years. Understory plants include salal, evergreen huckleberry, oregon grape and sword fern in varying densities and combinations throughout the site. A list of the plants found in the forest is attached as Appendix II.

The cleared areas that are the exceptions to this are areas for which leases or easements were granted by the DNR prior to county acquisition of the property. The largest of these areas is approximately 33 of the 40 acres leased for Rolling Hills Golf Course, which has been developed as most of seven holes of the golf course. This area is mostly highly maintained exotic grass fairways and greens, with a few native conifers left between the fairways. Other areas within the forest that are cleared include two small areas leased to North Perry Water District for a water tower and a well, a power line corridor and road rights-of-way through and next to the property.

Illahee Forest includes four distinct timber types, all of which are mid-seral temperate forest. The northwestern-most portion of the forest (near the intersection of McWilliams Road and Wheaton Way) is composed of mostly Red Alder mixed with Red Cedar and Maple. This area was logged in the 1930's, and again in the 1970's. Much of this area has wet soils.

The remainder of the property west of the incised Illahee Creek stream corridor is forested with 50-year-old Douglas-Fir, Western Hemlock, Red Cedar, Madrona and some White Pine tree stands. This area was partially logged in the late 1970's. There is evidence of blister rust on some of the White Pine trees.

That part of the Illahee Creek canyon on county property, between the slope breaks, was last harvested in the 1930's and is now a stand of mostly Red Alder and Big Leaf Maple, with patches and scattered Douglas-Fir and Red Cedar, some of which are 100 to 200 years old.

The final forested area within the county's ownership is the approximately 35 acres lying on the easternmost portion of the property, east of the Illahee Creek ravine. There is a stand of 115-year-old Western Hemlock, Red Cedar and White Pine with a scattering of 270-year-old Douglas-Fir. Root rot is killing many of these old growth trees, as evidenced by the "blown down" rate. DNR foresters surmise that the 270-year-old trees likely originated after a fire, and that the stand was apparently opened or the canopy was partly burned 125-145 years ago. Stumps and growth rings of adjacent trees indicate that the forest was "high-graded" (the largest, most commercially valuable trees logged) in the mid 1920's.

Vegetation management issues within the county-owned forest include fire protection, root rot pockets, blister rust and controlling invasive non-native (exotic) plants, such as English ivy, scotch broom and grasses. One likely source of the exotic plants is yard waste being dumped in the forest by neighbors.

### **c. Wildlife**

This section of the stewardship plan documents an evaluation by a DNR biologist, Deborah Lindley of existing and potential wildlife habitat functions of Illahee Forest on May, 1997. She visited the site, walking several representative areas and surveying the entire area by helicopter. Further information regarding wildlife occurrences and habitat concerns was provided during a meeting with citizens and local officials, also in May 1997. The evaluation is based upon Washington Department of Fish and Wildlife (WDFW) data on Priority Habitats and Species (PHS), DNR Natural Heritage Sites, Threatened and Endangered species, literature on habitat relationships, the Forest Ecosystem Management Assessment Team (FEMAT) report (1993), and the field visit and meeting mentioned above.

## 1. Wildlife Values

In addition to their intrinsic value, wildlife communities are fundamental elements of healthy ecosystems. Interactions among wildlife species and their habitats are many and complex, and are essential to ecosystem processes and functions. In the process of meeting their life needs, animals accomplish important ecosystem "work". For example, chipmunks and squirrels disperse mycorrhizal fungi (supports nutrient cycling for tree growth); birds, bats and shrews consume insects (including tree defoliators); other birds and mammals disperse seeds (maintain vegetative diversity); woodpeckers and beavers modify physical structures (create microhabitats).

E.O. Wilson urged us to remember the "little things" that run the world. Invertebrates also perform vital ecological functions. According to FEMAT, the litter and soil of the forest floor have some of the greatest biological diversity found anywhere. One square yard of soil may have 200,000 mites from a single group, and tens of thousands of other mites, beetles, centipedes, pseudoscorpions, springtails, and spiders. They are critical to many ecosystem functions; some may be indicators. Scientists estimate that 20 to 30 percent of the species have not been described yet. FEMAT described eleven functional groups, based on ecological roles: (1) coarse wood chewers, (2) litter and soil dwellers, (3) understory and forest gap herbivores, (4) canopy herbivores, (5) epizootic forest species, (6) aquatic herbivores, (7) aquatic detritivores, (8) aquatic predators, (9) pollinators, (10) riparian herbivores, and (11) riparian predators.

Mollusks are a major source of biodiversity in the forest. They are food sources for fish, mammals, reptiles, amphibians, and some birds. Mollusks as a group are vulnerable due to high endemism, rareness, low mobility, specialization and sensitivity to any ground disturbance.

Amphibians are ecologically important because of potentially high numbers and significant biomass (up to 5,000 individuals/acre). According to FEMAT, they are important environmental indicators; loss of overall amphibian diversity would have negative ecological consequences. They are vulnerable because they require specialized habitats such as intermittent streams, down wood, sloughing bark and moist microclimates, and they have low mobility and high genetic variability.

## 2. Wildlife Species Known to Occur on the Property

Deborah observed, heard or noted signs of the following species: pileated woodpecker, northern flicker, red-breasted sapsucker, downy woodpecker, Wilson's warbler, song sparrow, Western flycatcher, chestnut-backed chickadee, red-breasted nuthatch, American robin, common crow, Steller's jay, barn swallow, violet-green swallow, northern junco, black-tailed deer, raccoon, voles

(likely southern redbacked) and one bald eagle. Citizens noted observations of one otter and bald eagles roosting in trees on the property. Despite a very thorough search by helicopter at low elevation, Deborah observed no large raptor nests on or near the property. Washington Department of Fish and Wildlife (WDFW) data revealed no documented occurrences of threatened or endangered species on the property. There currently are no PHS designations on the property.

### **3. Known Occurrences of Species of Concern Near the Property**

There are a number of bald eagle nest territories along the shorelines within the surrounding four townships. The nearest territory is one mile to the south. Citizens noted observations of up to nine eagles feeding on the beach east of the property. The closest great blue heron rookery is three miles to the north. WDFW data also indicate purple martin and osprey nest sites, mountain quail, pileated woodpecker and Western pond turtle occurrences within six miles of the Illahee property. An osprey was observed on the nest at Kitsap Lake.

### **4. Habitat Functions**

Habitat on the property likely supports populations of invertebrates (insects, mollusks), small mammals (rodents), bats, and amphibians that are associated with mid-seral mixed conifer forests, conifer riparian communities, snags and down wood. The parcel is large enough to support several pair of pileated woodpeckers, and approximately 10-50 pairs of various species of small-bodied birds associated with mid-seral mixed conifer forests, the mosaic of adjacent openings and urban environments, and conifer riparian communities.

Examples of other wider-ranging animals likely to use the property as part of their home ranges include bald eagles, great blue herons, purple martins, belted kingfishers, saw-whet owls, and generalist species such as the black-tailed deer, coyote, red fox, raccoon, river otter, striped skunk, long-tailed weasel, barred owl red-tailed hawk, and great-horned owl. These generalists are all fairly common, widespread species in Washington landscapes that contain mixed conifer and hardwood forests interspersed with grass/herb/shrub openings and riparian areas.

Deborah observed several large, relic trees along Illahee Creek that would be suitable potential nest sites for bald eagles or other large raptors. Most of the conifer stands on the property would be suitable potential habitat for great blue heron nesting colonies. The parcel's size, topography and proximity to wetlands and the bay make these potential nest sites particularly valuable for long-term protection of these species because of their seclusion and nearby food sources.

### **5. Threats to Continued Wildlife Use of the Property**

Many of the more mobile species present or likely to be present on the property are there because of the remnant forest patches scattered throughout the peninsula. The greatest threat to their continued existence on the property, and on the peninsula, is continued habitat loss throughout the peninsula from urban development. As the remnant forest patches become smaller and more isolated from each other, they support fewer individual animals. When the distance between them becomes greater than a particular species' travel ability, individual animals cannot interact with others to reproduce, feed or disperse. When the animals die, the isolated patch cannot be repopulated because it is inaccessible to that particular species. Little by little, the species that make up the wildlife community disappear.

Eventually, these small, functionally isolated patches no longer support intact communities of forest-related wildlife. They are occupied instead by common, generalist bird species which are well-adapted to urban-forest mosaics, and the very small-bodied forest species (invertebrates, small mammals, amphibians). Abundance of exotic species (starlings, house sparrows), species associated with human activity (crows, jays), and brood parasites (cowbirds) can increase and displace some of the more vulnerable, specialized songbirds (neotropical migrants, secondary cavity-nesters, interior forest associates).

The change in vertebrate community composition may affect the invertebrate communities present. Unfortunately, little information is available to enable predictions of potential changes in invertebrate communities that may result from modification of habitats and vertebrate communities. Loss of habitat on the property itself would eliminate associated species. For instance, if the entire property was clear-cut logged, species associated with mid-seral conifer forests and related components would disappear. Since nearby suitable habitat is likely already occupied, displaced species would likely die. If snags and down wood were retained in sufficient amounts, qualities and distributions, woodpeckers, cavity-nesters and some invertebrates associated with openings would survive. If part of the property were not clear-cut, refugia would be available for some species to persist. Protection of the riparian zone and adjacent upland forest would likely ensure suitable habitat for the riparian species mentioned above, as well as some of the upland species. Of course, if the forest vegetation were removed entirely, as in a commercial or residential development, the site would no longer support any of the species.

### **6. Salmonid Utilization**

Illahee Creek supports populations of coho and fall chum salmon, as well as cutthroat and steelhead. The mainstream and two tributary streams all lie within narrow, incised valleys that provide good spawning habitat. What makes Illahee



Creek watershed unusual is the large percentage (67percent) that is still forested, in the middle of one of the most intensively developed parts of the Kitsap peninsula. While the instream habitat for salmonid in Illahee Creek is generally fair to good, the limiting factors are the lack of rearing habitat (ponds), instream (large) woody debris (LWD), and habitat complexity.

### Summary

From a broad wildlife conservation perspective, the most valuable habitat functions that the property provides or could provide include:

- Alternate bald eagle, great blue heron and osprey nesting, perching and roosting sites
- Potential nest and roost sites for purple martins and belted kingfishers
- Riparian and adjacent upland habitat for associated invertebrates (some of which may be locally endemic), amphibians, manunals and birds
- Quality down wood and snag components in a diverse forest patch for associated species.
- Preservation of the forested areas, controlling storm water scouring, reestablishing pools in the stream, riparian forest plantings and installing large woody debris would all benefit the habitat value of the stream for salmonid

Management recommendations would depend on anticipated uses.





GREEN  
BELT

ROLLING HILLS GOLF COURSE

HEART OF  
THE PARK

TRAIL AREA

OLD GROWTH  
AREA

ACTIVE USE  
AREA

ILLAHEE CREEK WATERSHED

DIXIE

**FIGURE 6 MANAGEMENT AREAS**

#### IV. Management Plan

##### a. General Recommendations

- i) Secure conservation easements over the entire site (both the County and privately owned lands), allowing uses as and where determined appropriate in Stewardship Plan only.
- ii) Review and revise the Stewardship Plan yearly.
- iii) Access points for users of the Preserve should be:
  - (1) Off Almira Drive to Active Use Area
  - (2) Off Almira Drive at Fuson Rd to the Trail Area, and to the Heart of the Park, when acquired and developed
  - (3) Thompson Lane off Riddell Rd to Trail Area
  - (4) Sunset Avenue (for Old Growth Preserve only)
- iv) Management recommendations are made for seven geographic areas. There are four areas defined within the existing boundaries of the site, one area which includes both County-owned and privately owned land and two areas which are currently outside the County-owned Illahee Preserve, but which are closely tied to the park, and which the committee recommends be purchased or preserved in the future. The geographic areas are:
  - (1) Within the Existing Park
    - (a) Old Growth Preserve
    - (b) Greenbelt
    - (c) Active Use Park Area
    - (d) Trail Area
  - (2) Rolling Hills
  - (3) Future Park Additions
    - (e) "Heart of the Park" (In holdings)
    - (f) Illahee Creek Watershed

##### b. Area Specific Recommendations

###### 1) Greenbelt

- (i) This ten-acre area along Wheaton Way, just south of McWilliams Road should be maintained in its natural condition as a visual and noise buffer, and as a sensitive area.
- (ii) The only appropriate activities within this area are habitat restoration and storm drainage "healing" projects.
- (iii) Environmental education is a possible activity from viewing areas on the edge of the area.

###### 2) Old Growth Preserve

- (i) This one hundred plus acre area consists of that part of the County property east of the Bonneville Powerline right-of-way, and is recognized as the most environmentally significant portion of the forest, and should be managed as habitat, with restrictions on uses that would compromise the habitat value.

- (ii) One parking lot should be developed for this area, off Sunset Avenue, at the end of the existing County maintained road. Long-term parking and access to this area will be from *the Heart of the Park* area, when it has been acquired and developed. Impermeable surfaces should be minimized. Storm water should be collected, stored and infiltrated on-site.
- (iii) Trail development should be limited to a few pedestrian-only, universally accessible trails with signage as environmental education. These trails should be located and designed to allow users to observe the old growth trees of various species, while minimizing damage to those trees by those users.
- (iv) Trails should not connect with the more active trails to the west of Illahee Creek. When the Heart of the Park is developed, a bridge from that area to the Old Growth Area should be a part of that development.
- (v) Illahee Creek ravine should be preserved for wildlife, with no trails down to the creek, and trail layout done to discourage attempts to get down to the creek.
- (vi) Viewing platforms can be built at the edge of the ravine, with signs educating users of the fragility of the slopes, and of wildlife's need for privacy.



### 3) Illahee Creek Watershed

- (i) This area is somewhat ill defined, but consists of the remainder of Illahee Creek downstream from the County Park, and of the other two main tributaries of the creek - one to the east of the park, and the other flowing to the north, located south of the park. The property within these riparian corridors is owned by a relatively small number of entities. The North Perry Water District owns a large percentage of this property. The Kitsap Unitarian Universalist Fellowship owns a significant site, and there are a relatively small number of private property owners holding the remaining parcels. Most of this property is of limited development value, as it is either very steep, wet or both.

- (ii) It is recommended that these properties be formally protected from development, either through acquisition by the County or by placing conservation easements on as much as possible of the stream, including the two main tributaries.
  - (iii) The Stewardship Committee should take the lead, working with other groups and organizations, to restore degraded habitat within the entire watershed area, including adding large woody debris to the streambed and replanting native vegetation within the riparian areas.
  - (iv) The County and Stewardship Committee should work with the Rolling Hills Golf Course owners to create a storm water retention facility, to reduce the negative impacts of the increased run-off caused by the development of roads, residential areas and the golf course.
  - (v) Construct a "Forest to Sound" trail along the west and south side of the stream, taking care to minimize damage or intrusion to sensitive areas. Signing for environmental education and interpretation should be developed along the length of this trail, as part of its development.
  - (vi) Develop and operate as an educational facility a salmon hatchery near the mouth of Illahee Creek.
- 4) Active Use Park Area**
- (i) This approximately twenty-acre area is located in the southwestern portion of the park, on the most level part of that area. If active use facilities are not developed in this area before the golf course is acquired (or the lease expires, per Area 6, "Rolling Hills" recommendations, below), these facilities should be located on already cleared lands of the golf course.
  - (ii) This area will be the most heavily impacted by future development of recreational facilities within the park, with sensitive clearing anticipated for development of the following types of uses:
    - (a) Picnic areas
    - (b) Playgrounds
    - (c) Open (multi-purpose) fields
    - (d) Soccer and/or softball fields (not lighted)
    - (e) Tennis and basketball courts (not lighted)
    - (f) Restrooms and parking lots
  - (iii) The following uses are deemed not to be appropriate, and should not be allowed:
    - (a) Camping
    - (b) Horses
    - (c) Motorized vehicles
    - (d) Paintball
  - (iv) Access to this area should be from Almira Avenue or from Riddell Road at the Petersville Road intersection.
  - (v) Development should be sensitive of the natural features, with cuts and fill minimized, and as many large trees left as is feasible. Impermeable surfaces

should be minimized. Storm water should be collected, stored and infiltrated on-site.

- (vi) A significant visual buffer of natural forest should be left between any areas cleared for active uses and roads adjacent to the forest (Almira and Riddell).

#### 5) Trail Area

- (i) This management area constitutes approximately 200 acres of the park. This part of the park is, by virtue of the soils, topography, vegetation and access, is best suited for passive recreational uses. For those same reasons, this area has suffered most from unregulated destructive uses in recent years. Four-wheel drive vehicles have created trails through the area, often causing significant environmental damage. The roads blazed by the four-wheelers have provided access for illegal dumping. Homeless people have colonized portions of this area, with garbage accumulation, under story destruction and sanitary consequences. Paintball enthusiasts have stripped the underbrush from parts of this area as a consequence of their recreational activities. Timber thieves have cut and removed living trees within this area. Storm drainage solutions are required for water from the golf course and at points along the four-wheel roads.
- (ii) The plans for this area are to heal the damage done by past inappropriate uses, to eliminate those uses at this site from now into the future, and to convert and augment the existing trail network to serve pedestrians and bicycles.
- (iii) Create a trail system with a variety of types of trails for pedestrians and bicyclists:
  - (a) Universally Accessible Trails (flat, wider, shorter, suitable for elderly and people with disabilities)
  - (b) Pedestrian Trails (narrower, can traverse steeper topography)
  - (c) Bicycle Trails (both double and single track)
  - (d) Multi-use Bike-Ped(estrian) Trails (using existing logging/four-wheel roads and trails as a beginning)
  - (e) Both looped systems of trails, and trails which could serve as alternative transportation routes through the site should be planned and built
  - (f) Environmental Interpretation Trails (thoughtfully located and signed to increase knowledge of and appreciation for natural history of the Preserve while minimizing impacts)
- (iv) That part of the Trail Area between Fuson Road right-of-way and McWilliams Road is well suited for a universally accessible trail.
- (v) Trail head facilities with parking, signs and restrooms could be developed at Thompson Lane, just north of Riddell, at the Fuson Road and Almira intersection, and possibly at the park-and-ride lot at the intersection of Wheaton Way and McWilliams Road, and at the Heart of the Park when it is acquired and developed. Impermeable surfaces should be minimized. Storm water should be collected, stored and infiltrated on-site.

#### 6) Rolling Hills

- (i) This area includes approximately 100 acres of land under a single ownership, most of which is developed as an 18-hole golf course, and 40 acres of land owned by the County, which is leased by the golf course owner, and on which

most of seven holes of the golf course are developed. The golf course has a 55 year lease on the county land, which expires in June 2026.

- (ii) Kitsap County should purchase the golf course by the time the lease term expires. If the County is unable to purchase the golf course by that time, it should not renew the lease agreement, and should develop both active and passive recreational facilities on the property. Storm water improvements, designed to restore stream volumes and water quality of both Illahee and Steele Creeks to natural conditions should be developed on the golf course property. These improvements should be designed to be as natural and have as little negative environmental impact as possible. Areas not so developed should be revegetated with native plants to match the adjacent forestlands. The active uses shall be consistent with those listed above for the active use area, and should be developed only to provide for needs as documented in official Comprehensive County Park and Open Space Plans in force at the time.

**7) Heart of the Park**

- (i) This 20-acre area consists of 14 platted lots owned by three separate private individuals. The properties are surrounded on three sides by the County-owned Illahee Preserve, and on the north by Rolling Hills Golf Course. Physical access to this area is via half-mile long Thompson Lane, through the County property. Thompson Lane has been the site of much illegal dumping and is a primary point of access for illegal and destructive motorized vehicle use of the County property.
- (ii) The County should, over time, purchase these lots.
- (iii) Subsequent to county acquisition, this property should be redeveloped to accommodate parking and an Environmental Education Interpretive Center. It is located convenient to both the Old Growth Preserve and the Trail Area, and could serve well as a centralized parking area for both.
- (iv) Fuson Road should be developed as the access to this area after the County has purchased it. Thompson Lane can then become a trail spine for the park.

**c. Two Year Priorities**

Kitsap County Parks and the Illahee Stewardship Committee should concentrate efforts over the next two years on the following actions:

- (1) Contact the Great Peninsula Conservancy and other appropriate private, non-profit land conservation organizations to initiate an effort to secure conservation easements on the properties, as recommended in the beginning of this Management Plan.
- (2) Block access to the park from motorized vehicles, using a variety of means such as guard rails, tank traps, root wads, etc. as determined appropriate on a site-by-site basis.
- (3) Develop points of access (with parking, signs and restrooms) for pedestrian and bicycle trail users at Thompson Lane near Riddell Road and at Fuson Road just east of Almira Lane.
- (4) Plan and begin developing a trail system as described in the Trails Area description, using the existing roads and four-wheel trails as the basis for the initial trails.
  - (5) Restore the degraded areas, including:
    - (i) The Four-wheel roads and trails
    - (ii) Areas damaged by storm water

- (iii) The areas denuded by paintball activity
- (iv) The hills damaged by four-wheel hill-climbing activities
- (6) Identify and remove invasive exotic plants.
- (7) Place park signs at the trailheads and at visible corners of the park.
  - i. Riddell Road and Almira Lane
  - ii. McWilliams Road near Wheaton Way
- (8) Develop a strong Stewardship Program for the park, recruiting as many interested groups and individuals as possible, including: corporations, school groups, youth groups, church groups and individual citizens.
  - (9) Prepare a forest management plan for the County-owned forestlands, with forest health, habitat diversity and fire safety as the primary concerns. Contact the University of Washington Extension Service to determine if they are willing and able to assist with this.

**d. County and Stewardship Committee Responsibilities/Roles**

Kitsap County Facilities, Parks and Recreation and the Illahee Stewardship Committee both have a strong interest in and responsibility for the preservation, maintenance and development of Illahee Preserve Park, as outlined in this Stewardship Plan. In order to work most effectively in the best interest of the forest and the public, it is important that there be a clear mutual understanding of the most appropriate and effective roles and responsibilities of each partner. These roles, responsibilities and relationships may evolve over time, and as they do, those changes should be documented in future revisions of this plan.

**1) Joint Responsibilities**

- (i) Planning for the property, including site-planning elements such as trail and active use facilities designs, locations, classifications and development standards.
- (ii) Review this Stewardship Plan annually and recommend revisions as deemed appropriate.

**2) Stewardship Committee Roles and Responsibilities**

- (i) Be an organizing force and a focal point for people wishing to become involved with the preservation, restoration, maintenance and development of Illahee Preserve and the Illahee Creek Watershed.
- (ii) Work to secure corporate and individual donations of funding and/or time and labor for the maintenance and improvement of the forest.
- (iii) Work with the County Parks Department's Special Projects and Volunteer Coordinator to organize work parties in the park building trails, restoring degraded habitat, removing invasive exotic plants, and other such projects, as identified in the stewardship plan.
- (iv) Work with the County Parks Department to organize a volunteer "eyes and ears" program for monitoring the forest, with an established procedure for recording and reporting inappropriate behavior or other situations within the forest requiring County attention.
- (v) Join a land conservation organization, such as the Great Peninsula Conservancy and begin working with property owners to secure conservation easements, as discussed above.



### 3) County Parks Department

- i) Work with the Stewardship Committee to facilitate work parties, consistent with the stewardship plan. The County can provide materials and tools to facilitate planned projects.
- ii) Acquire those properties surrounding the forest, as recommended in this plan. Funding opportunities may influence which properties are acquired first, but the general priorities are:
  - (a) Conservation easements along the riparian corridor
  - (b) Heart of the Forest lots
  - (c) Illahee Creek properties
  - (d) Rolling Hills Golf Course
- iii) Include in the County's Capital Facilities Plan funding necessary to make improvements recommended in this stewardship plan.
- iv) Secure a professional forester to advise the County and the Stewardship Committee on management of the forest for habitat, fire safety and forest health, with special attention given to root rot pockets.
- v) Employ integrated pest management practices, minimizing the use of chemical pesticides, herbicides and fertilizers in management and operation of the forest.



# **ILLAHEE PRESERVE STEWARDSHIP PLAN**

---

## **Appendix I**

### **Resolution Establishing Stewardship Committee**

**ESTABLISHMENT OF THE ILLAHEE FOREST STEWARDSHIP COMMITTEE AND APPOINTMENT OF MEMBERS TO THE COMMITTEE**

**WHEREAS**, the Kitsap County Board of Commissioners advocates for public participation and supports and encourages citizen involvement in all matters of County government; and

**WHEREAS**, community members and neighbors worked for twenty years to find a way to preserve the Illahee Forest property and brought to the Board of Commissioners' attention their desire to preserve the Illahee Forest with some provision for appropriately located and designed recreation facilities for the enjoyment of all citizens; and

**WHEREAS**, the 352.6 acre undeveloped property known as Illahee Forest was acquired by Kitsap County in 2001 from the Department of Natural Resources; and

**WHEREAS**, it is in the best interest of the Forest, the community, and Kitsap County to institute a Stewardship Committee for Illahee Forest comprised of community representatives interested in working with the Kitsap County Department of Facilities, Parks and Recreation to preserve and protect this outstanding community resource; and

**WHEREAS**, it is expected that the purpose of the Illahee Forest Stewardship Committee will evolve over time, the first charge of the committee shall be to develop a master plan for the Forest that will include recommendations about appropriate uses of the Forest, management and operations of the Forest, and specific roles of volunteers in the stewardship of the Forest.

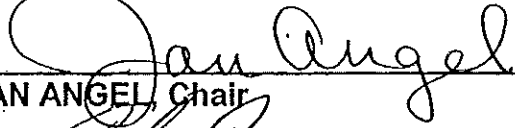
**NOW THEREFORE BE IT RESOLVED**, that the Illahee Forest Stewardship Committee is hereby established to advise the Facilities, Parks and Recreation Department and to facilitate citizen involvement in the planning, development and management of the Illahee Forest and that the following individuals shall be named as members of the Illahee Forest Stewardship Committee.

Brett Aho	Irwin Krigsman
Elysa Aho	Judith Krigsman
James Aho	Hugh Morris
Audrey Boyer	Frank Richmond
Cynthia Brakstad	Cathy Stensen
David Hecker	Jim Trainer
Cynthia Holben	

RESOLUTION NO. 38 -2003

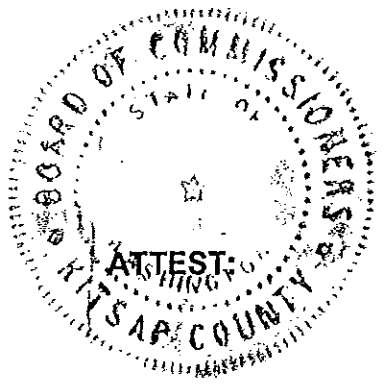
Adopted this 24th day of February 2003

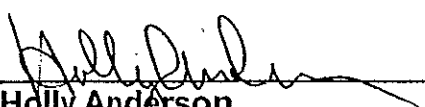
BOARD OF COUNTY COMMISSIONERS  
KITSAP COUNTY, WASHINGTON

  
\_\_\_\_\_  
JAN ANGEL, Chair

  
\_\_\_\_\_  
CHRIS ENDRESEN, Commissioner

  
\_\_\_\_\_  
PATTY LENT, Commissioner



  
\_\_\_\_\_  
Holly Anderson  
Clerk of the Board

# **ILLAHEE PRESERVE STEWARDSHIP PLAN**

---

## **Appendix II**

### **Vegetation of Illahee Preserve**

---

ILLAHEE PRESERVE STEWARDSHIP PLAN

---

Vegetation of Illahee Parcel

Common Names

Scientific Names

Trees

Douglas-Fir  
Western Hemlock  
Western White Pine  
Western Red Cedar  
Red Alder  
Big Leaf Maple  
Pacific Madrona

*Pseudotsuga menziesii*  
*Tsuga heterophylla*  
*Pinus monticola*  
*Tuija placita*  
*Alnus rubra*  
*Acer macrophylla*  
*Arbutus menziesii*

Shrubs

Salal  
Oregon grape  
Evergreen huckleberry  
Trailing blackberry  
Elderberry  
Salmonberry  
Bracken fern  
Wild rose  
Snowberry  
  
Large huckleberry  
Oceanspray

*Gaultheria shallon*  
*Berberis nervosa*  
*Vaccinium ovatum*  
*Rubus ursinus*  
*Sambucus racemosa*  
*Rubus spectabilis*  
*Pteridium aquilinum*  
*Rosa gymnocarpus*  
*Symphoricarpos*  
*albus/mollis*  
*Vaccinium parvifolium*  
*Holodiscus discolor*

Perennial Forbs

Sword fern  
Miners lettuce  
Mosses  
Liken  
Trillium  
Evergreen violet  
Star flower  
Twin flower  
Yarrow  
Prince's Pine

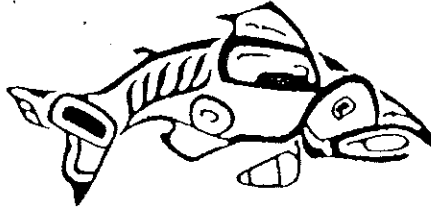
*Polystichum munitum*  
*Claytonia sibiriana*  
  
*Trillium ovatum*  
*Viola sp*  
*Trientalis latifolia*  
*Linnaea borealis*  
*Acchlys triphylla*  
*Chimaphila umbellata*

# **ILLAHEE PRESERVE STEWARDSHIP PLAN**

---

## **Appendix III**

### **Salmonid Habitat Analysis**



## Watershed Ecology LLC

FM: Christopher May  
TO: Whom it may concern  
RE: Illahee Creek

August 22, 2002

1. As part of an on-going evaluation of salmon-supporting watersheds in Kitsap County, I have had the opportunity to assess current conditions in Illahee Creek. The attached watershed narrative summarizes present condition of salmonid habitat in Illahee Creek. In general, habitat conditions in the Illahee Creek system can be described as relatively good in comparison to similar urbanizing streams within the greater Puget Sound Lowland (PSL) Eco-region.
2. Illahee Creek is unique in several respects. Although the entire watershed is included in the Urban Growth Area (UGA) of East Bremerton, the level of development within the watershed is only moderate (~15% imperviousness). The most unique aspect of this "urbanized" watershed is the high level of native forest cover remaining. The Illahee Creek watershed is still over 60% forested, with the riparian corridor largely intact and unfragmented except in the headwaters. These landscape-level characteristics appear to have contributed to the creek retaining a significant level of ecological function in spite of the cumulative impacts of historic and current land-uses. Although salmonid abundance and diversity are lower than historic levels, multiple species of salmon and trout continue to utilize Illahee Creek, making it a potentially significant salmon refuge in the eastern part of the Kitsap Peninsula.
3. One of the keys to maintaining and enhancing salmonid habitat within the Illahee ecosystem will be proper watershed stewardship. This should include conserving natural areas that still remain within the watershed as well as restoring other areas that have been degraded or lost. It is important from an ecological perspective that there is a continuity of critical habitat that supports all life-history stages for all species of salmonids supported by Illahee Creek. In particular, there must be adequate (both quantity and quality) migratory, spawning, and rearing habitat for coho and chum salmon, as well as cutthroat and steelhead trout. In this regard it will be imperative that conservation and restoration efforts encompass all components of the ecosystem, from the estuary to the headwaters. This will almost certainly require a cooperative effort between natural resource agencies, local government, watershed citizen groups, and landowners.
4. One area of the creek that has been degraded is instream rearing habitat. This includes pools, wetlands, and beaver ponds that were likely historically present in the middle and upper portions of the stream system. In addition, large woody debris (LWD) and other components of natural instream habitat complexity are also lacking throughout the watershed, but most especially in the headwater areas. The local citizen's watershed stewardship group has already begun to work on these problems. Riparian forest plantings and LWD installation projects have been undertaken and more are planned for the near future. There is also an effort underway to further protect native forest in the uplands of the watershed. These seemingly small projects are the start of the long-term effort that will be required to maintain and enhance the ecological integrity of the entire watershed, including salmon and their habitat. Again, it should be emphasized that an integrated, comprehensive conservation and restoration process will likely be the most effective course of action.
5. The other key habitat area is the estuarine and adjacent nearshore area at the mouth of the creek. These areas are important for juvenile salmonid rearing, particularly for chum salmon and sea-run cutthroat trout. These areas have also been shown to be important migratory refuge areas for multiple species of salmon, both adults and juveniles, as they move between freshwater and saltwater. Maintaining this vital link between the freshwater and marine environments, both critical for the long-term survival of salmon, should be a high priority in any watershed-based conservation effort.



# Illahee Creek

## Salmonid Utilization

Illahee Creek (WRIA 15.0266) supports populations of coho and fall chum salmon, as well as cutthroat trout and possibly steelhead. The mainstem of Illahee Creek and two tributary forks are located in a relatively narrow valley that provides good spawning habitat. Instream habitat in Illahee Creek is generally fair to good and the riparian corridor is largely intact, with a mixed mature forest found in most reaches. Like most Kitsap Peninsula streams, one of the primary limiting factors for salmonid productivity is limited rearing habitat (pools), instream large woody debris (LWD), and habitat complexity as compared to natural stream systems. Although the entire watershed is located within the Urban Growth Area (UGA) of East Bremerton and is only moderately developed (~15% imperviousness), well over half of the watershed still forested, mainly in the Illahee Forest Reserve (~360 acres, including a section of old-growth forest). The estuary of the creek has been moderately impacted by a major road crossing and encroachment of shoreline residential development, but is still ecologically functional.

## *Watershed Description*

The Illahee Creek watershed includes mainstem Illahee Creek and two salmonid bearing tributaries (~ 2 miles of stream channel). The basin enters the west shore of Port Orchard Bay approximately 1.0 mile north of Illahee State Park. The culvert under Illahee Road was previously identified as a partial fish passage barrier, but was replaced during the summer of 1999 and has provided good passage since. A water diversion dam was located approximately 0.2 mile upstream of Illahee Road. This structure is still in place, but the dam has since been bypassed by the natural movement of the creek within the channel migration zone (CMZ), thus restoring unrestricted salmonid passage throughout the watershed. The north branch stream channel is naturally confined in a ravine for most of its length downstream of McWilliams Road. Most of the north branch flows through the Illahee forest, with development limited to the McWilliams Road corridor. Significant erosion is occurring on the north branch downstream of the Rolling Hills Golf Course. This reach is steep with significant scour ongoing, likely resulting from stormwater runoff from the golf course and development in the headwaters. The north branch channel is incised, and continues to further incise, primarily from this same stormwater runoff from development and the golf course in the north branch headwaters. There is a large wetland (~20 acres) at the headwaters of the north fork upstream of McWilliams Road that provides flow in the north fork during dry summer months. Passage into this wetland area is restricted by culverts at McWilliams Road and at the outlet of the wetland. The south branch of the creek flows through a more developed sub-basin than the north branch. The south channel is incised, and continues to further incise, primarily from stormwater runoff from development in the north branch headwaters. A dam at the outlet of a pond at the headwaters of the south fork blocks normal instream flow, with the south fork often going dry in late summer. The riparian corridor is dominated by mixed, mature forest and is largely intact except in the headwaters of both branches and where the creek is not confined within a natural ravine.

There is a well-developed and relatively functional estuary at the mouth of Illahee Creek. The estuary currently has little shoreline armoring, although there have been some filling and dredging activities that have occurred in the past. There is also a small, intact salt marsh at the outer end of the estuary. The shallow intertidal delta likely provides good rearing and migration habitat for natal salmonids and other fish passing through the area. There are few such estuaries along this section of the East Kitsap nearshore zone, making even small estuarine areas valuable as salmonid rearing and migration refuges. Just upstream of the mouth, the culvert under Illahee Road has been recently replaced and salmonid migration improved with instream enhancements.

## Salmonid Habitat Data Summary

No quantitative instream habitat assessments have been conducted in the Illahee Creek watershed. Completion of a comprehensive watershed assessment, including quantitative

(TFW) instream habitat surveys should be conducted as soon as possible. Surveys conducted as part of this project indicate that the creek has adequate spawning habitat in both branches, with relatively good spawning gravel quality throughout. Rearing habitat (pools) is limited due mainly to a lack of sufficient LWD, especially very large, key pieces. However, the rearing habitat that is available is generally of fair to good quality. Abundant juvenile coho and cutthroat were noted on several occasions during habitat surveys and were also noted by water resource survey teams from the North Perry Water District during the summer of 2002 (CR Hydrologic Consultants unpublished data). Unlike many Kitsap Peninsula streams, Illahee creek generally flows year-round, even during the dry summer months, providing suitable habitat for juvenile and adult salmonids during all life stages. The local salmon enhancement and community groups have been actively involved in restoration and conservation efforts throughout the watershed. These efforts should continue.