Randy – I saw the notice of the October 21 planning meeting for South Whidbey and Possession Point State Parks. No one from the Natural Heritage Program will be able to attend, but I wanted to draw your attention to a report that we provided to State Parks in 1993 titled "Washington State Parks Natural Forest Inventory." In that report we recommended Natural Forest as an appropriate land-use category for much of South Whidbey State Park. We also included management recommendations in that report, which I've attached to this email.

The primary plant community of interest at the time the 1993 reported was prepared was the Douglas fir – western hemlock / swordfern community. It was listed as a Priority 2 community type in the 1991 *State of Washington Natural Heritage Plan*. Although the plant community classification and nomenclature has changed somewhat since then, the plant communities present within South Whidbey State Park are still a priority for conservation because of their primarily natural origins and because similar forested plant communities in the Puget lowlands have mostly been lost to conversion or degraded through more intensive management.

We do not have any recent inventory information regarding the overall ecological condition of South Whidbey State Park. However, if it is comparable in terms of its condition to what it was when our 1993 report was prepared, we would encourage you to strongly consider Natural Forest as an appropriate designation.
If you have any questions, please feel free to contact me.

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WASHINGTON STATE PARKS
NATURAL FOREST INVENTORY

INTRODUCTION

These reports summarize the results of the inventory of twenty Washington State Parks by the Washington Natural Heritage Program. The purpose of this inventory was to describe and delineate natural forests and associated native plant communities. The goal was to identify and recommend areas for designation by the Parks and Recreation Commission as Natural Forest Areas and Natural Area Preserves and to make appropriate management recommendations.

This inventory effort was conducted by Natural Heritage Program staff under contract with Washington State Parks and Recreation Commission and The Nature Conservancy (July 23, 1992). Christopher Chappell, project plant ecologist, inventoried and wrote reports for fifteen parks and Rex Crawford, plant ecologist, inventoried and wrote reports for three parks. They collaborated on two parks. Field inventories were complete in September 1992.

Each state park report consists of a list of the 1991 Natural Heritage Plan elements present on the park, discussions of stand age, dominance, condition, and landscape setting, and Natural Forest Area and/or Natural Area Preserve recommendations. A partial species list of plants, maps of existing vegetation, and maps with recommended boundaries for Natural Forest Areas and/or Natural Area Preserves accompany each park report. On parks inventoried by Chappell, a list of birds and other wildlife detected during inventory is also provided.

Natural Area Preserves are recommended at Deception Pass (2 areas), James Island, Moran, and Patos Island State Parks.

Natural Forest Areas are recommended at Beacon Rock, Deception Pass (3 areas), James Island, Jones Island, Mount Spokane (2 areas), Moran, Old Fort Townsend, Penrose Point, Point Lawrence, Riverside (3 areas), South Whidbey, and Sucia Island (5 areas) State Parks.

No Natural Forest Areas or Natural Area Preserves are recommended at Diamond Point, Fort Ebey, Hope Island, Lake Cushman, Lake Wenatchee, Larrabee, and Twin Falls State Parks. Sensitive Area management recommendations are discussed for natural areas at each of these state parks.

Many of the areas identified in this report need additional inventory for animal species associated with old-growth forest or other special habitats. Inventory of additional state parks will document and identify other natural communities that may need special protection. We recommend an inventory of the following parks: Blake Island, Field Springs, Fort Ebey (inventory

incomplete), Fort Flagler, Fort Simcoe, Leadbetter Point, Millersylvania, Obstruction Pass, Seaquest, Stuart Island, and Twanoh. Parks that were visited briefly in 1992 and determined not to have significant natural forests were Fort Worden, Limekiln Point, and Scenic Beach.

In conclusion, the Washington State Parks system contains the best and largest representatives of native forest ecosystems in the Puget Trough region. The protection and management of the natural values in these areas will provide future generations a legacy of their natural heritage found nowhere else in the state.

The boundary and management recommendations are those of the Washington Natural Heritage Program. Official boundary designations and management activities require approval by the State Parks & Recreation Commission.

WASHINGTON STATE PARKS NATURAL FOREST INVENTORY

The following are Natural Heritage Program recommendations to the State Parks & Recreation Commission regarding buffer zones, boundaries, and general management of Natural Forest Areas. Official boundaries and management are the responsibility of the State Parks & Recreation Commission.

Buffer Zones for Natural Forest Areas

The specific boundary recommendations for each park were designed with the following assumptions regarding buffer zones adjacent to existing development and park boundaries. The purpose of the buffer zones will be to provide an area for hazard management to protect human property and safety, while simultaneously maintaining, to the maximum extent possible, ecosystem structure and function in the Natural Forest Areas. The recommended boundaries, as drawn in these reports, include the buffer zones. Given these goals and assumptions, we recommend the following specifications regarding the management and determination of buffer zones:

1. **Manage buffer zones as de facto natural forest.** In order to maintain natural communities located adjacent to existing development, development expansion will not occur in buffer zones.

2. **Hazard tree removal or other stand alterations in buffer zones should only be carried out where demonstrably necessary to protect people or property.** This may include moderate or high degree hazards.

3. **A buffer is recommended on both sides of public roads and power lines, and around utilities.** This buffer does not apply to unpaved service or fire roads used as trails by the public within Natural Forest Areas.

4. **A buffer is recommended along park boundaries. This does not apply to Natural Forest Area boundaries located within parks.**

5. **A buffer is recommended around existing park developments, including campgrounds, picnic areas near paved roads, trail-heads, and heavily-used day use areas accessible by road.**

6. **Buffers should be no wider than necessary to meet legal and management requirements.**

General Management Recommendations for Natural Forest Areas

1. **Implement trail and hazard management within Natural Forest Areas such that natural forest processes are maintained near trails and visitors do not need to leave trails to view natural structures and processes.** Buffer zones are unnecessary around trails and unpaved service or fire roads within Natural Forest Areas.

   a. Limit hazard tree felling along trails within Natural Forest Areas to high risk trees only. This may include very unstable snags or trees immediately adjacent to trails that are likely to fall if bumped. Snags or trees that are not seriously leaning or unstable should be left standing for their habitat value.

   b. Maintain trails and service roads within Natural Forest Areas with minimum impact to ecosystem structure and function. In most cases, only the section of a log lying on the trail itself should be cut out and moved a short distance into the adjacent forest. Logs that fall on trails should generally not be removed from the forest because they are a critical component of ecosystem function. Only in the case of excessive blowdown, would the many sections that lay on the trail need to be removed from the forest.

2. **Post signs where trails enter Natural Forest Areas.** These signs should include a list of approved and prohibited uses, as well as some explanation of the ecological values of the site. We encourage the use of interpretive signs within Natural Forest Areas, which may draw from the information in these reports.

3. **Use barriers to prevent use of trails by horses, bicycles and motorcycles in areas that are sensitive to their impacts.** Generally, this would include all trails that provide access to grasslands, "balds", and wetlands. Barriers may include gates, trenches, or large rocks that are appropriately located and designed. Recreational use, including mountain bikes and equestrians, is not permitted in Natural Forest Areas (WAC 352-16-020).

4. **Investigate the introduction of prescribed fire as a natural process management tool to maintain particular plant communities.** The application of prescribed fire will depend upon specific park objectives and the results of research investigations. More research is needed on the role and effects of fire in Puget Trough plant communities.

WASHINGTON STATE PARKS NATURAL FOREST INVENTORY

South Whidbey

SIZE: 347 acres

LOCATION:

South Whidbey State Park is located approximately 12 miles south-southeast of Coupeville, Island County. The W1/2 of Section 29 and a portion of the E1/2 of Section 30 in Township 30 North, Range 2 East.

1991 NATURAL HERITAGE PLAN ELEMENTS:

Priority	Element[1] Number	Element Name	Relative[2] Extent
2	PT-T7	Douglas fir-western hemlock/ swordfern community	M
*	PT-T12	red alder/swordfern community	m

OTHER NATURAL COMMUNITIES:

	western redcedar-western hemlock/ skunk cabbage community	m
	Sitka spruce-western hemlock/ deerfern community	m

[1] PT-T7 = Puget Trough Province Terrestrial Community 7

[2] M = major, m = minor

FOREST STAND AGE

Most of the forest is in the mature age class. An old-growth stand appears on the slope below the campground and in the campground itself. Young stands occupy the remaining area of the park (about 15%). Scattered old-growth trees are found in the natural-origin young and mature stands.

CANOPY DOMINANCE AND STRUCTURE

Douglas fir dominates the forest canopy over most of the site. Western hemlock is abundant as a lower canopy layer under the Douglas fir, and occasionally hemlock co-dominates the main canopy. There is one small young stand dominated by hemlock. Western redcedar and grand fir are minor canopy components in some of the Douglas fir stands.

Red alder is also abundant, dominating or co-dominating most young logged-over stands, as well as portions of the bluff overlooking the saltwater. In the young logged stands, alder is sometimes mixed with Douglas fir. On the bluff, alder is co-dominant with bigleaf maple. Scattered Sitka spruce, western redcedar, grand fir, and western hemlock of various sizes are present in this hardwood stand. There is also a significant wet-site stand in the "Classic U" that is dominated by a mixture of redcedar, hemlock, alder, maple, and spruce.

Most mature stands are dominated by trees 18-36 inches in diameter, with occasional individuals 36-48 inches. Many mature stands have scattered residual old-growth Douglas fir that are 48 to 72 inches in diameter.

Because of the rapid growth rates of trees on the extensive productive sites, many mature stands have developed multiple canopy layering similar to that in classic "old-growth". All of them have at least the beginnings of this structure. Logs of many sizes and decay classes are numerous and snags are frequent throughout the mature conifer stands.

The old-growth stand occupying the campground and adjacent slope has a greater density of old-growth residuals than in most of the park, along with a mature cohort of Douglas fir and other species.

The natural-origin deciduous forest on the bluff is dominated by alder and maple mostly 10-24 inches in diameter, with a few maple that are larger. Scattered conifers are common in lower canopy layers and, occasionally, as large old trees emerging above the deciduous canopy. The canopy is somewhat irregular and has many openings because of soil disturbances. The young alder stands are simpler in structure with a single even canopy layer of trees 6-16 inches in diameter.

NON-FOREST VEGETATION

The entire park is forested except in small openings created by development.

ECOLOGICAL CONDITION

The mature conifer-dominated stands that cover most of the park are a result of natural regeneration after fire. Residual old-growth Douglas fir that survived the major fire in the last century have extensive charring on their bark. Most of the mature cohort is 130-140 years old. Occasionally, mature trees have a trace of charcoal on their bark, indicating limited surface fire since the time of the last big fire. One very large residual Douglas fir that was recently felled as a hazard