

# Cypress Island Natural Resources Conservation Area

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## MANAGEMENT PLAN

*June 1996*



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**  
Jennifer M. Belcher - Commissioner of Public Lands  
Kaleen Cottingham - Supervisor

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Jennifer M. Belcher  
Commissioner of Public Lands

June 24, 1996

Dear Friend:

I'm pleased to present to you the management plan for the Cypress Island Natural Resources Conservation Area (NRCA). It's fitting that this management plan was adopted in 1995, which marked the 20-year anniversary of the department's first acquisition on the island—Foss Cove/Eagle Cliff on August 20, 1975. The Cypress Island Citizens' Advisory Committee, the Swinomish Tribe, and other participating citizens are to be congratulated for their active involvement in the development of a plan that will guide the management of the Cypress Island NRCA for years and generations to come.

Cypress Island is the last largely undeveloped island in the San Juan group; a rare find in our age of rapid growth. On the 5,500 acre island, DNR manages 4,700 acres, with nearly 3,600 acres of forests, wetlands, grassy balds, and marine areas currently protected under NRCA designation. The island's natural features provide spectacular scenery and vistas, as well as recreational and outdoor environmental education opportunities.

Adoption of this plan brings to fruition a long period of cooperation among commissioners of public lands. Each of us, during our respective term of service, has recognized the uniqueness of Cypress Island and we've striven to protect its beauty for the enjoyment of future generations. Through continued involvement of legislators, conservationists, recreationists, island residents, tribes, and the public at large, we'll continue to seek conservation opportunities on the island.

The Department of Natural Resources welcomes your continued interest and involvement as the Cypress Island NRCA management plan is implemented.

Sincerely,

**JENNIFER M. BELCHER**  
Commissioner of Public Lands



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# Acronyms

<b>DNR</b>	Washington State Department of Natural Resources
<b>DOE</b>	Washington State Department of Ecology
<b>IAC</b>	Interagency Committee for Outdoor Recreation
<b>NAP</b>	Natural Area Preserve
<b>NHP</b>	Natural Heritage Program
<b>NRCA</b>	Natural Resources Conservation Area
<b>OAHP</b>	Office of Archaeology and Historic Preservation
<b>RCW</b>	Revised Code of Washington
<b>SEPA</b>	State Environmental Policy Act
<b>TES</b>	Threatened, Endangered and Sensitive species
<b>WAC</b>	Washington Administrative Code
<b>WDFW</b>	Washington State Department of Fish and Wildlife

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# Contents

## **1 Preface**

## **3 Introduction**

- 3 The Department of Natural Resources
- 6 The Cypress Island NRCA Planning Process
- 6 Limits of this Plan

## **9 Summary**

## **11 Purpose**

- 11 The Cypress Island NRCA
- 11 NRCA Boundary
- 13 NRCA Statewide Management Plan
- 13 Vision Statement

## **17 Management Goals & Objectives**

## **21 Management Plan**

- 21 Resource Protection/Enhancement/Restoration
- 27 Public Use
- 28 Tribal Use
- 30 Outdoor Environmental Education
- 30 Commodity-based Activities
- 31 NRCA Administration
- 32 Fire Management
- 33 Monitoring
- 34 Law Enforcement

## **37 Conceptual Development Plan**

## **41 Glossary**

### **Appendices**

- 45 Appendix A–Natural Resources Conservation Areas Act
- 47 Appendix B–Natural and Cultural Resources Inventory
- 51 Appendix C–Monitoring Techniques and Research Needs

## **53 Reference Literature**

### **Figures**

- 4 Figure 1. DNR Organization Chart
- 7 Figure 2. The Cypress Island NRCA Management Planning Process
- 29 Figure 3. Key Public Use Decisions

### **Maps**

- 5 Map 1. DNR Regions and NRCAs in Washington State
- 12 Map 2. Cypress Island and Vicinity
- 15 Map 3. Cypress Island NRCA and NRCA Boundary
- 20 Map 4. Cypress Island, Condition of NRCA and Marine Resources
- 38 Map 5. Facilities Master Plan
- 39 Map 6. Old Growth Management Unit



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# Preface

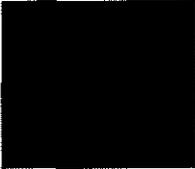
In 1987 the Natural Resources Conservation Area Program was created by an act of the Washington State Legislature. Cypress Island's state-owned lands were identified as one of four new NRCAs in the state. This brought to fruition the long-time vision of many people — including the Commissioner of Public Lands, state legislators and residents, conservationists and recreationists. The Department of Natural Resources was selected as the agency to manage these lands for the conservation purposes of protecting ecological systems and providing low-impact use opportunities to the public.

Currently Cypress Island NRCA totals almost 3600 acres of forest, wetland and grassy bald habitat. The NRCA also includes the state-owned tidelands adjacent to the island. After an assessment of resource sensitivity, state-owned bedlands adjacent to these tidelands may be added to the NRCA. Acquisition began with transfer of twenty acres from School Trust to NRCA via the Trust Land Transfer program. The remainder was purchased from willing property owners. Additional lands are being added to the NRCA as money becomes available and property owners are willing to sell.

This plan meets the requirement set forth in the Natural Resources Conservation Act (RCW 79.71) and adheres to the policy guidelines stipulated in the Natural Resources Conservation Area Statewide Management Plan (1992). The contents of this plan affect only the DNR-managed Natural Resources Conservation Area on Cypress Island.

The planning process would not have been possible without the assistance of the eleven members of the Cypress Island NRCA Advisory Committee, who advised DNR on the issues addressed in this plan. Thanks also to the Washington State Departments of Fish and Wildlife and Ecology for valuable technical assistance, and to DNR Natural Heritage Program (NHP) and Division of Aquatic Resources staff and others who collected the information and developed recommendations that were essential to this planning effort.





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# Introduction

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## The Department of Natural Resources (DNR)

DNR manages approximately 5 million acres for the benefit of current and future citizens of Washington State.

### FEDERAL GRANT LANDS

Through the Congressional Enabling Act of 1889, Washington state acquired 3 million acres of federal land to be managed in trust for the benefit of schools, universities and other state institutions.

### FOREST BOARD LANDS

Under acts of the Washington State Legislature in 1923 and 1933, Washington State was enabled to acquire land by purchase or transfer from the counties. Managed to benefit citizens of the state and counties, revenue generated from Forest Board Lands accrues to these governments and other junior taxing districts within the county.

### SOVEREIGN AQUATIC LANDS

Under the Equal Footing Doctrine and confirmed by provisions of the Washington Constitution, 2 million acres of navigable and tidal waters were obtained and are managed for the people of Washington and the protection of the aquatic rights of fishing, navigation and commerce.

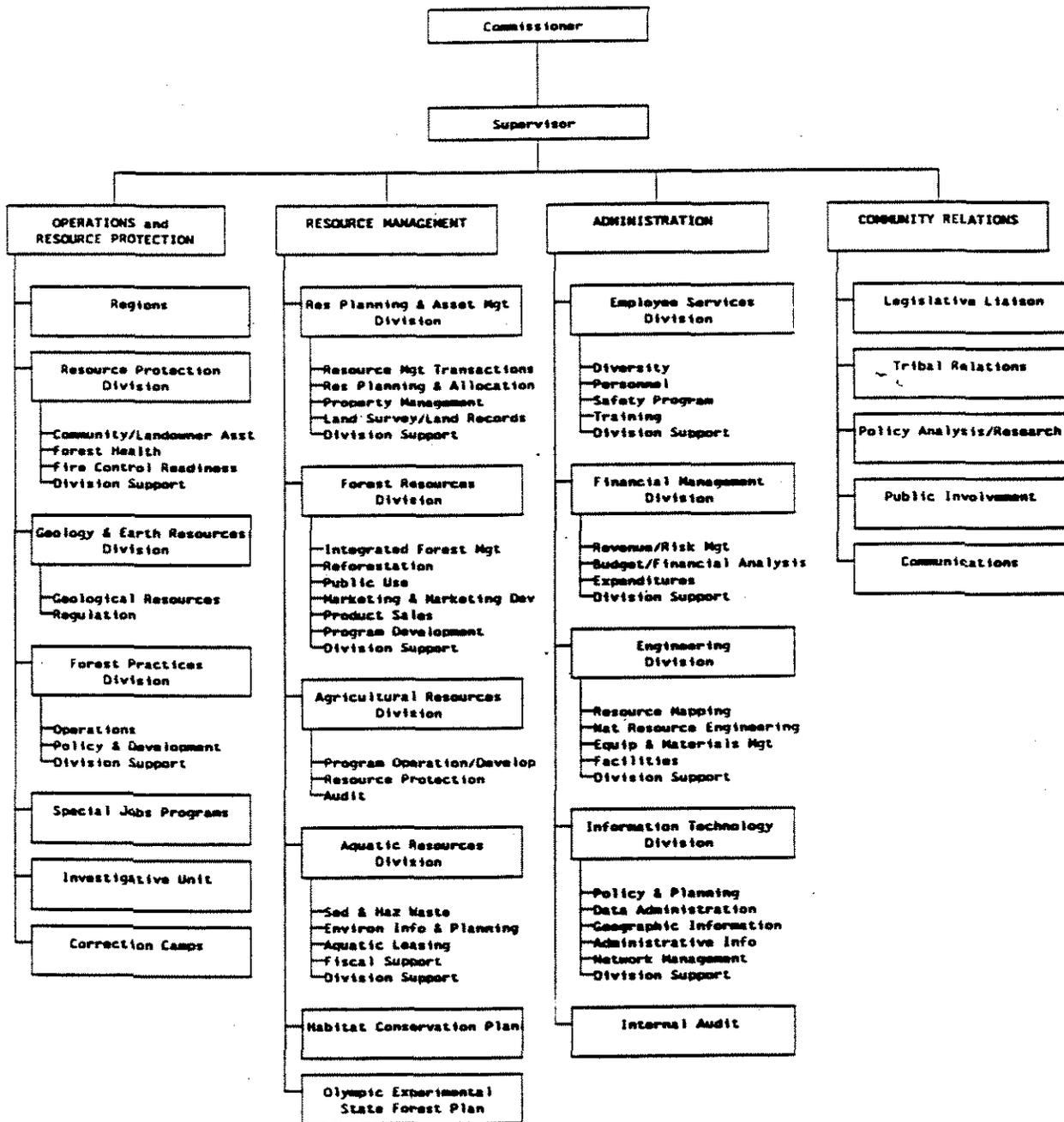
### NATURAL AREA PRESERVES (NAP)

Established by an act of the Washington State Legislature in 1972, high-quality natural habitats were acquired by gift or purchase by the DNR. NAPs are managed for the perpetual protection of rare species and outstanding ecosystems native to Washington State.

### NATURAL RESOURCES CONSERVATION AREAS (NRCA)

Created by an act of the Washington State Legislature in 1987, the NRCA program's conservation purposes include protecting outstanding ecological, geologic, and archaeology resources and providing opportunities for low-impact public use and environmental education.

FIGURE 1. DNR ORGANIZATION CHART



July 1, 1994

## Region Offices

For more information about a specific site, contact the region where it is located:

**All Region Offices can be reached by dialing 1(800) 527-3305**

### Central

1405 RUSH RD  
CHEHALIS WA 98532-8763  
(206) 748-2383

### Northeast

225 S SILKE RD  
PO BOX 190  
COLVILLE WA 99114-0190  
(509) 684-7474

### Northwest

919 N TOWNSHIP ST  
SEDRO-WOOLLEY  
WA 98284-9395  
(206) 856-3500

### Olympic

411 TILlicum LANE  
FORKS WA 98331-9797  
(206) 374-6131

### South Puget Sound

28329 SE 448TH ST  
PO BOX 68  
ENUMCLAW  
WA 98022-0068  
(206) 825-1631

### Southeast

713 EAST BOWERS RD  
ELLENSBURG  
WA 98926-9341  
(509) 925-6131

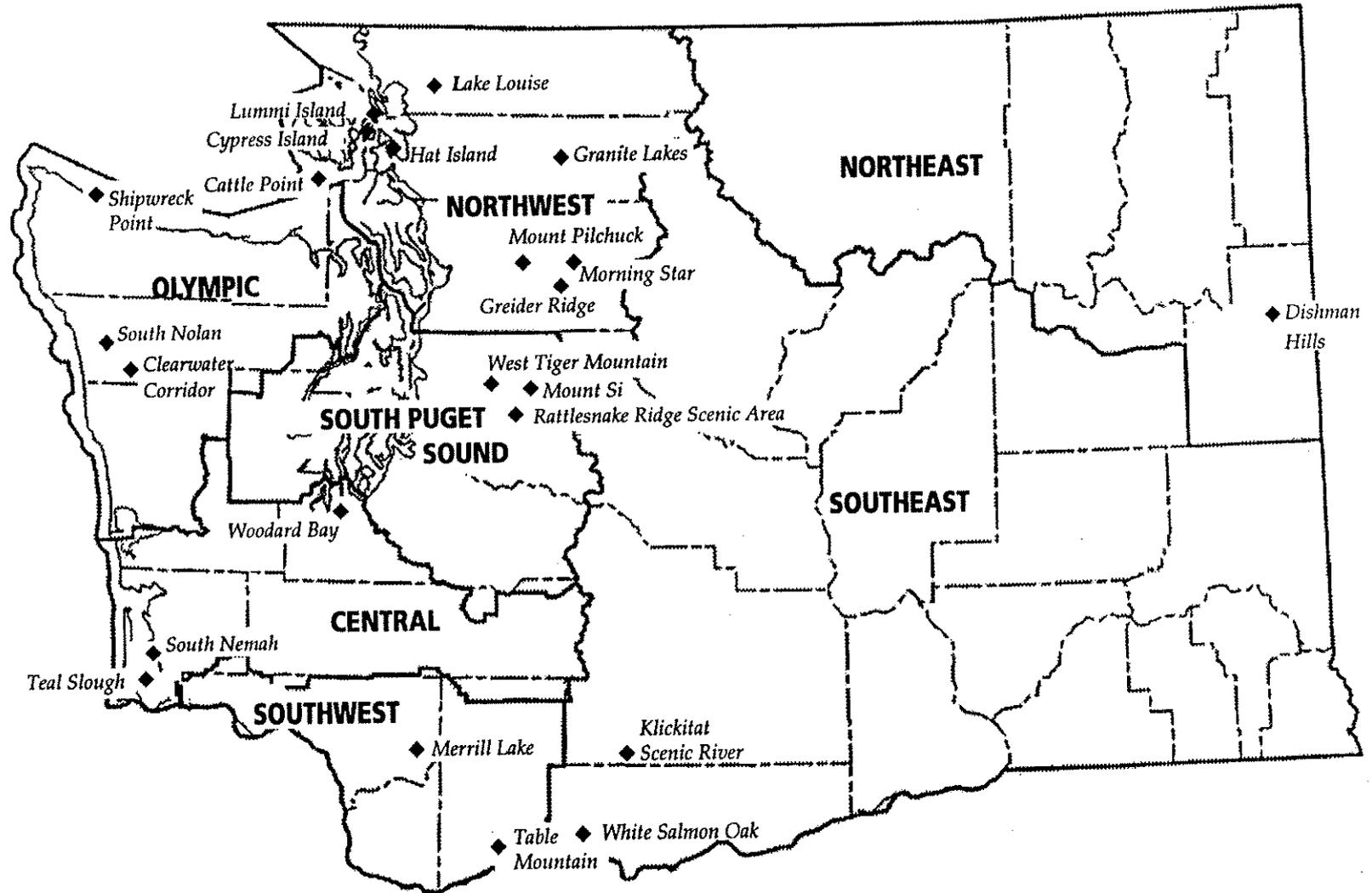
### Southwest

601 BOND RD  
PO BOX 280  
CASTLE ROCK  
WA 98611-0280  
(206) 577-2025

### DNR Olympia Headquarters

1111 WASHINGTON ST SE  
PO BOX 47000  
OLYMPIA WA 98504-7000  
(360) 902-1000

MAP 1: **DNR REGIONS AND NRCAS IN WASHINGTON STATE**



WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

Jennifer M. Belcher - Commissioner of Public Lands  
Kaleen Cottingham - Supervisor

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# The Cypress Island NRCA Planning Process

The Cypress Island NRCA Management Plan was developed by DNR's Northwest Region staff with the assistance of an 11 member citizens advisory committee (see inside cover for acknowledgments). Staff identified issues by internal and public scoping, mapped findings from resource inventories, and developed goals and objectives for protecting known resources and providing public use opportunities. The committee, in 18 months of public meetings, assisted staff in identifying and resolving the issues addressed in this plan and agreed by consensus to the management direction and decisions presented in this plan. The plan then entered an internal and public review process in compliance with DNR policies and the State Environmental Policy Act (SEPA).

## RESOURCE INVENTORY

Consistent with the NRCA Act, the planning process for the Cypress Island NRCA identified "significant resources to be conserved" (79.71.070). Preliminary reconnaissance studies were done in six areas: archaeology, history since European settlement, soils, geology, water resources and ecology. (See Appendix B for summary.) Inventories showed where sensitive resources and potential public use opportunities occur on the NRCA.

## CONCEPTUAL DEVELOPMENT PLAN

A Conceptual Development Plan (Part IV) has been created by matching the guidelines from this plan to existing NRCA ownership, known sensitive resources and public use demand.

## PUBLIC REVIEW

In compliance with the State Environmental Policy Act (SEPA) and the NRCA Statewide Management Plan, this plan draft was available and distributed for review and comment by the public and tribal, federal, state and local agencies. Prior to final approval by the Commissioner of Public Lands a public hearing was also held during the public review period.

## FIVE YEAR REVIEW

In compliance with the NRCA Statewide Management Plan, this plan will be reviewed by DNR, the Statewide Advisory Committee and the public every five years, enabling staff to revise this plan to address current management issues.

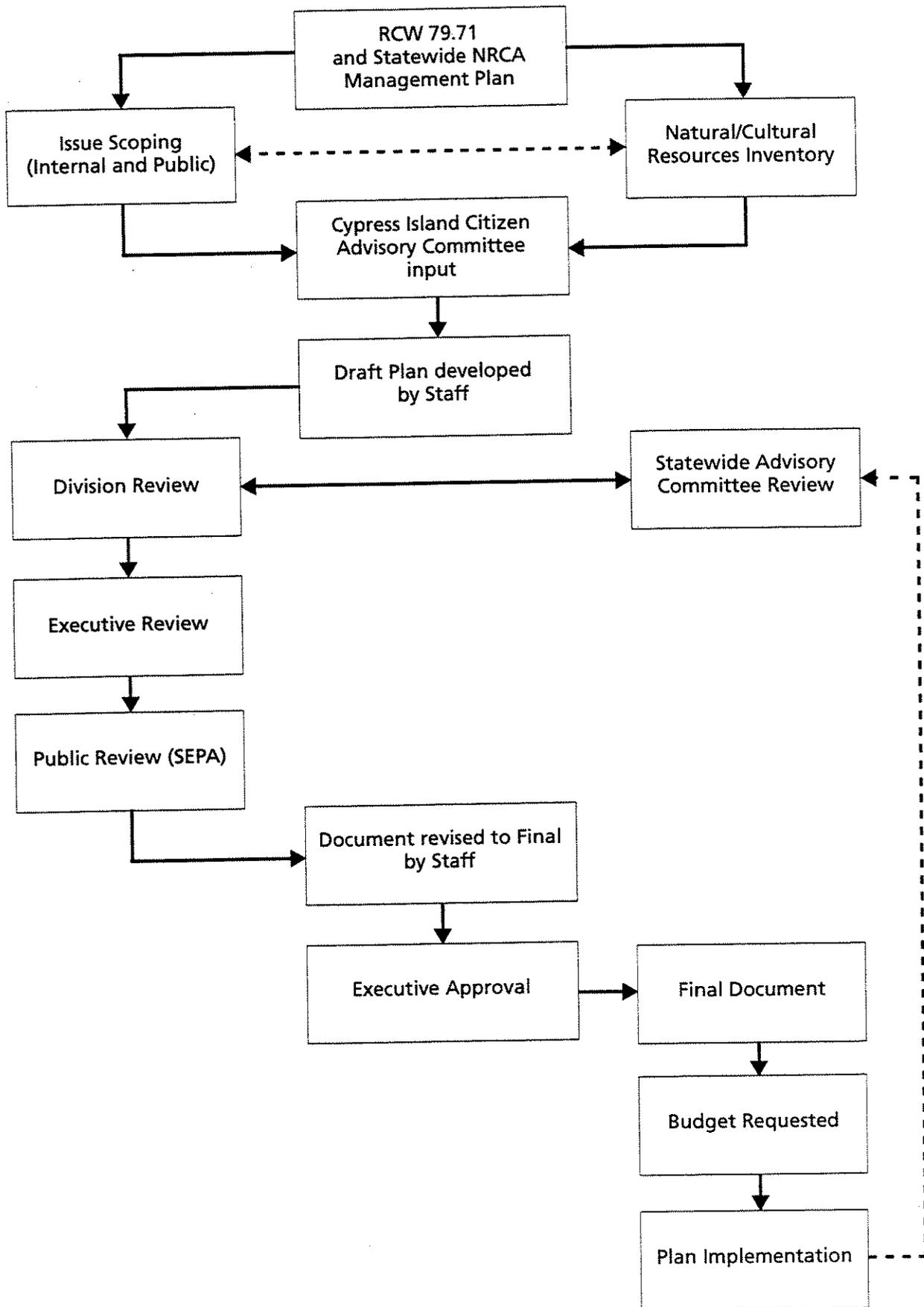
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## Limits of this Plan

The goals and strategies outlined in this plan apply only to the NRCA and not to private and Natural Area Preserve (NAP) properties on Cypress Island. This plan provides general guidelines to assist DNR in making decisions in the future management of the Cypress Island NRCA. Detailed development and restoration plans will be developed by DNR according to the guidelines of this plan.

Implementation of this plan is funding-dependent. DNR will implement and enforce the goals and strategies of this plan as funding is available. The contents of this plan will be used to make budget requests for site planning, implementation and monitoring.

FIGURE 2. THE CYPRESS ISLAND NRCA MANAGEMENT PLANNING PROCESS





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## Summary

The Cypress Island Natural Resources Conservation Area (NRCA) is to be managed for the recovery and preservation of natural environmental conditions, while providing low-impact public use and environmental education opportunities.

### THE PLANNING PROCESS

In 1991 the Commissioner of Public Lands appointed the Cypress Island NRCA Advisory Committee. The committee met for 18 months to assist the Department in determining appropriate management direction for the Cypress Island NRCA. Issues and concerns raised by the public, detailed reconnaissance studies of the NRCA, the NRCA Act and NRCA Statewide Management Plan (1992) were considered by the committee and DNR staff to produce the following recommendations.

### PROTECTED RESOURCES

The Cypress Island NRCA will be managed for the protection of its outstanding terrestrial and marine ecological systems, scenic value, cultural resources and habitat for Threatened, Endangered and Sensitive (TES) species. Sensitive resources identified and mapped during planning include wetlands, grassy balds, critical habitat for two TES species, cultural deposits and registered water rights. All public uses and administrative activities will be screened in consultation with local tribes and appropriate agencies to determine their potential impact on sensitive resources and the outstanding scenic and ecological features protected on the NRCA.

### ECOSYSTEM MAINTENANCE AND RESTORATION

DNR operations on the NRCA will emphasize restoration and maintenance of the island's forest, grassland, wetland, and adjacent marine communities. All roads not needed for administrative purposes will be closed. Natural revegetation will be relied upon to return old roads to their natural condition, except where erosion or non-native plant invasion requires more active stewardship. Local stock of native plants will be used in restoration projects. Non-native plants will be monitored along trails and roads, and least-impact techniques will be used for controlling invasive non-native plants. Island fire history will be studied, and mimicked where feasible for maintaining grassland and forest communities. The Department will work with the Washington Department of Fish and Wildlife (WDFW) and local tribes to develop management strategies for keeping the island deer population wild and limited in number and to identify and protect other wildlife, particularly TES species.

### TRAILS AND FACILITIES

Trails and facilities will be placed to provide the public with access to a sample of the outstanding scenic and educational opportunities on the NRCA, and where public use is determined to have no long-term negative impact to protected resources. Whenever possible, existing disturbed areas, such as road corridors, will be used for trail and facility locations. Trails will be located to leave the NRCA as contiguous and unfragmented as possible. Public use will be routed away from Natural Area Preserves

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(NAP), private land and identified sensitive resources. Outdoor environmental education will be emphasized in facility planning and provided at major entry and use points on the island. Prior to any land-disturbing activities, DNR will provide site plans and work schedule to local Tribes. Unobtrusive colors/materials and placement of signs and facilities will be used to protect scenic quality of site.

**PROHIBITED/LIMITED USES**

Pack animals, bicycles and all motorized and non-motorized vehicles are prohibited, except for administrative purposes. Pets are allowed in designated areas and on leash only; pet area will be designated in consultation with local Tribes. Unauthorized trails and water trespasses will be removed. New water right applications will be challenged by DNR if they are determined to affect surface waters on the NRCA.

**MONITORING**

Monitoring techniques will be applied to gauge public use impacts and demand, success of NRCA recovery and management, and long-term ecological health. Input from Tribes, agencies and organizations will be encouraged; results will be shared.

**FIVE YEAR REVIEW**

The Cypress Island NRCA Management Plan will be reviewed by DNR every five years to revisit the issues, goals and objectives identified, and the success of management strategies outlined in this plan.

**Cypress Island NRCA Fact Summary**

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<b>Designation</b>	<b>Approx. # acres</b>
Natural Resources Conservation Area	3587
Natural Area Preserve	1073
Total Managed by Department	4660
Private	840
Total on island	5500

Marine area inside NRCA Boundary is restricted to tidelands only.

Three recreation sites totalling 15 acres are managed by DNR for primitive camping and are located at (1) Strawberry Island, (2) Cypress Head, (3) Pelican Beach. More than 25 miles of hiking trail and road converted for that purpose are open to the public with seasonal restrictions for protection of Threatened, Endangered and Sensitive (TES) species. Approximately 1000 acres of the NRCA are dedicated to Highly Sensitive Resources protection.

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# Purpose

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## The Cypress Island NRCA

Cypress Island was selected to be an NRCA because:

- It is the largest relatively undeveloped island in the San Juan Islands, where extensive areas of undeveloped shoreline and uplands are becoming rare.
- The Island contains unusual geological characteristics, outstanding examples of native biological communities, critical habitat for federally protected species, and significant marine and cultural resources.

Within the NRCA boundary, 4660 acres of high quality forest, wetland and grassland communities are protected in department-managed Natural Area Preserve (1073 acres, managed under the Draft Cypress Highlands NAP Management Plan) and Natural Resources Conservation Area (3587 acres, to be managed under this plan). The NRCA boundary also includes the tidelands adjacent to Cypress, Strawberry and Cone Islands.

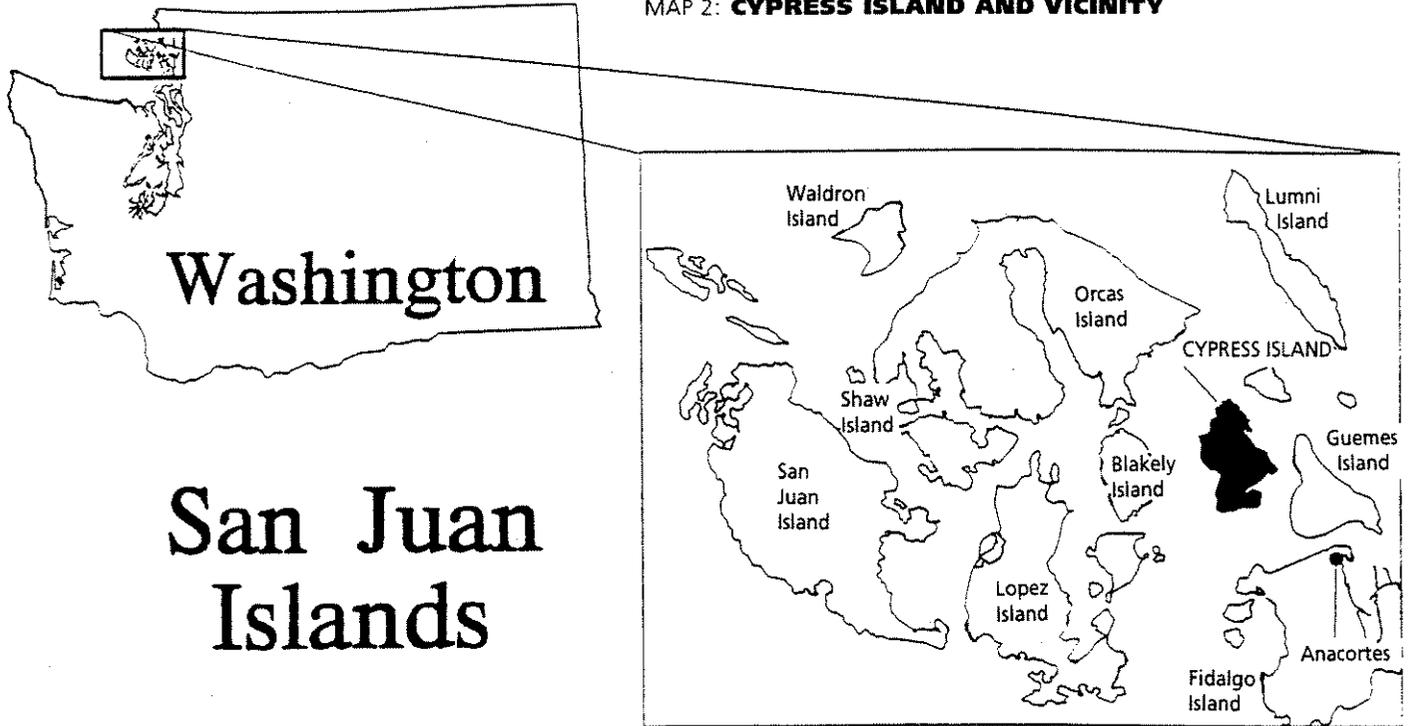
The southern two-thirds of the island is the only protected low-elevation serpentine forest in Washington and may support unusual plant communities. The island's grassy balds, talus slopes, high quality wetlands, streams, lakes and forests are home to rare and common plants and animals, including two Threatened, Endangered or Sensitive (TES) species. The marine area surrounding the island is home to a variety of fauna, including marine mammals, shore and migratory birds, fish and microscopic marine organisms.

Cypress Island provides a scenic reminder to passers-by of a rustic, pre-settled western Washington. On island, steep topography offers visitors vistas of the San Juan Islands, mainland Washington and the Olympic and Cascade mountains. Cypress is a popular public use site for boaters offering recreation sites, scenic vista points, lakes, and miles of trail and abandoned road.

## NRCA Boundary

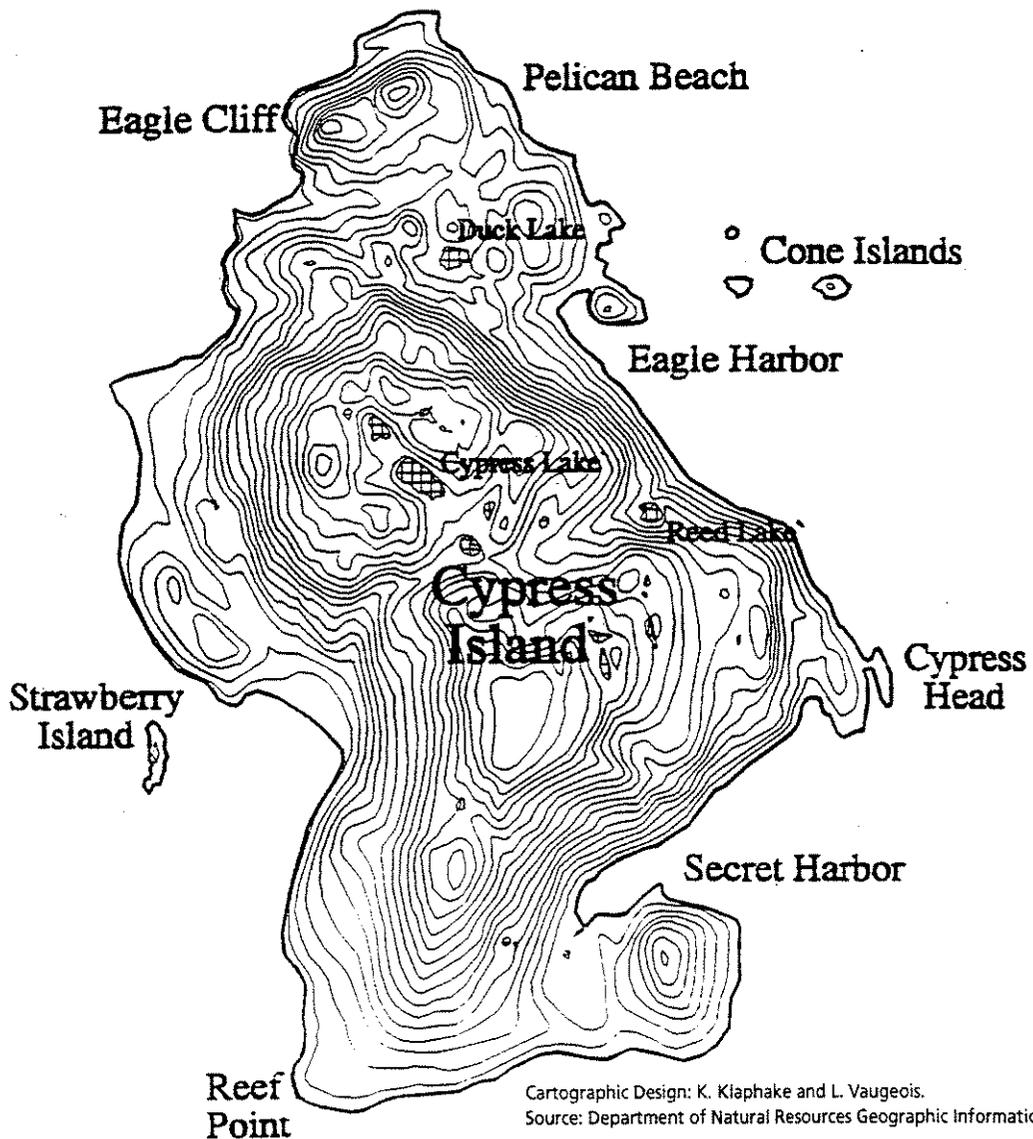
The NRCA boundary contains all state-owned NRCA lands plus other lands which meet the legal criteria for acquisition by the state for NRCA designation (see glossary, NRCA Boundary). The NRCA boundary is approved or changed through a review process which includes a public hearing. DNR is authorized to acquire full or partial ownership of land within the NRCA boundary from only willing sellers or through voluntary land donation. Private lands within the NRCA boundary are not restricted by this management plan nor by inclusion within the NRCA boundary.

MAP 2: CYPRESS ISLAND AND VICINITY



Washington

San Juan  
Islands



Cartographic Design: K. Klaphake and L. Vaugeois.  
Source: Department of Natural Resources Geographic Information System.

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The NRCA boundary includes the tidelands adjacent to Cypress, Strawberry and Cone Islands. Based on an assessment of resource sensitivity, the state-owned bedlands will be added to the NRCA. (See Marine Area Management for further discussion.)

There are approximately 900 acres of private tidelands and uplands within the NRCA boundary with nearly 100 private parcels ranging from less than an acre to several hundred acres.

DNR manages several types of public ownership/lease within the NRCA boundary:

- Natural Area Preserve (NAP)
- NRCA
- Recreation site leases funded by IAC
- State-owned tidelands

The NAP is managed under the terms of the Draft Cypress Highlands NAP Management Plan (1993). Aquatic lands surrounding the island are managed in accordance with RCW 79.90 - 79.96; the NRCA goals and objectives identified in this (Cypress Island NRCA Management) plan also apply. The NRCA is managed under this (Cypress Island NRCA Management) plan.

## **NRCA Statewide Management Plan**

The NRCA Statewide Management Plan was developed with the assistance of a 9 member citizen advisory committee and adopted by the Commissioner of Public Lands in 1992. Intended to provide policy for NRCA management, the plan prioritizes the purposes of the NRCA as follows:

- The primary purpose of the NRCA program is to protect outstanding examples of native ecosystems, habitat for threatened, endangered and sensitive (TES) plants and animals and scenic landscapes.
- Opportunities for environmental education and low impact public use will be provided where such uses do not adversely affect the resource values the area is intended to protect.

Pursuant to the NRCA Act and the NRCA Statewide Management Plan, this plan contains guidelines for protecting sensitive resources and provisions for low-impact public use and environmental education. [See Appendix A for summary, NRCA Act]

## **Vision Statement**

This plan is intended to promote the following ecological and public use characteristics in the next 50 to 100 years:

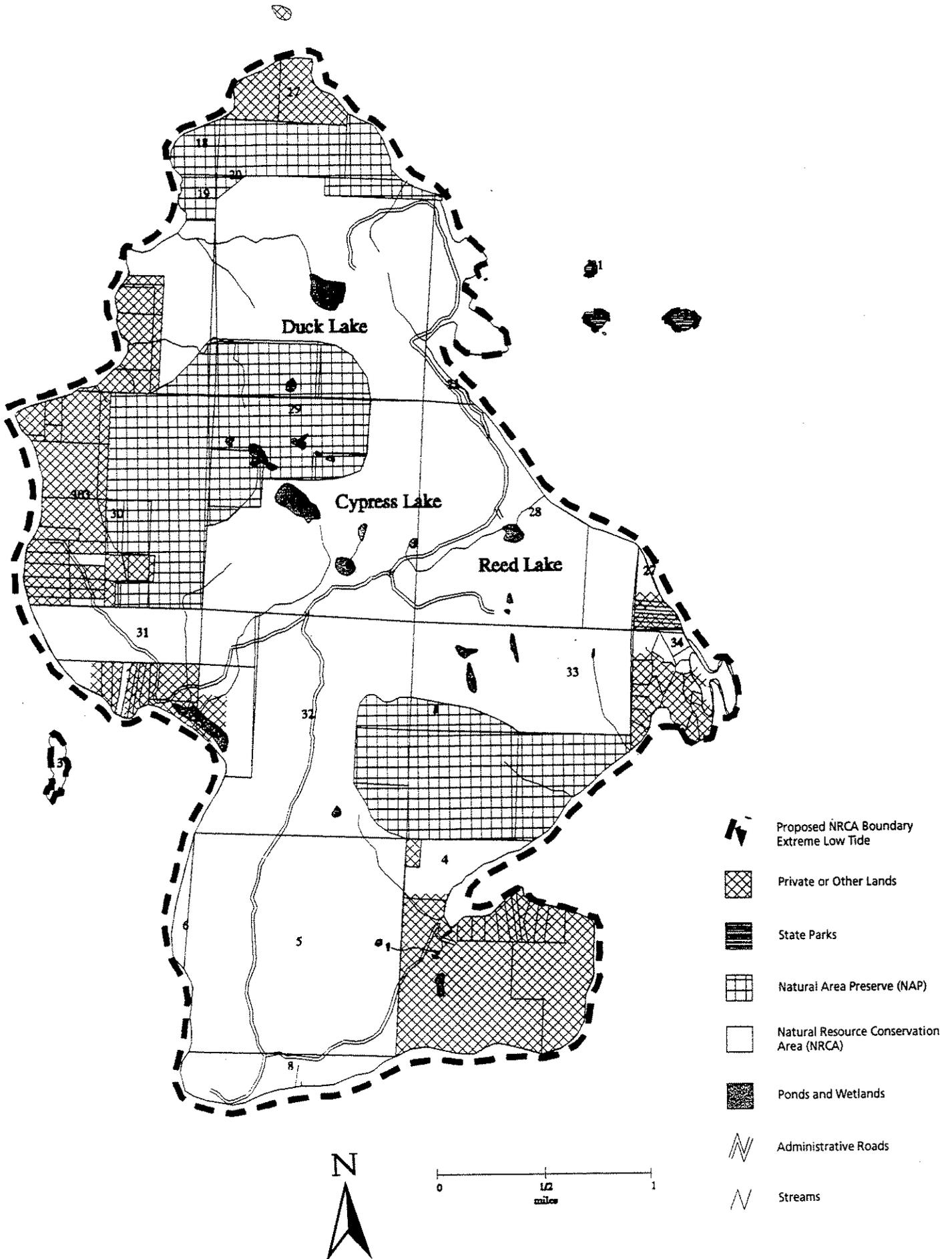
The Cypress Island NRCA-NAP complex and surrounding marine area is a unique natural resource in the San Juan Islands. A mosaic of natural, high-quality habitat types have recovered and are maintained on the island and surrounding public aquatic lands. Most of the island is covered in late successional forest supporting native flora and fauna. Grassy balds and wetlands provide breaks in a mostly closed and complex forest canopy. Marine area surrounding the island is a flourishing habitat of native aquatic plants and marine-dependent animals.

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To protect the natural characteristics and habitat qualities on the NRCA, public use facilities are concentrated in a relatively small area of the island. The public has access to a sample of each of the outstanding natural characteristics in the NRCA. Marine resources are protected with appropriate installation of buoys and designation of public use areas and activities. Environmental interpretation accompanies development to enhance public enjoyment and encourage public participation in protection of the NRCA. Public use is closely monitored. Where use levels or activities are incompatible with resource protection, use is controlled, sites may be closed and new sites may be developed on the NRCA or elsewhere in the region.

Natural processes are the primary force in the restoration and maintenance of the island's outstanding natural characteristics. NRCA management emphasizes the promotion of region-wide biological diversity by protecting native species with particular attention to those reduced in numbers (rare) in the region. Where feasible, natural processes proceed without interruption, creating a mosaic of habitat types and features that support native species. Active management is dedicated to restoring excessively disturbed and degraded areas and enhancing habitat.

MAP 3: CYPRESS ISLAND NRCA AND NRCA BOUNDARY



Cartographic Design: K. Klaphake and L. Vaugeois.  
Source: Department of Natural Resources Geographic Information System.



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# Management Goals & Objectives

Goals 1-5 are taken from the NRCA Act (RCW 79.71) and goal 6 from RCW Title 27. Objectives are a product of the research, analysis, advisory committee meetings and public input of the Cypress Island NRCA management planning process. These objectives are unique to the management of the Cypress Island NRCA and are referenced in the Management Plan (see annotations in Part III).

## Goal One: Maintain, enhance and restore ecological systems

### OBJECTIVES

- 1.1 Protect natural processes that promote region-wide biological diversity in the island's marine and terrestrial environments.
- 1.2 Rely upon, and avoid interference with, those natural processes that result in the restoration and maintenance of natural conditions, native habitats and native species diversity.
- 1.3 Use resource manipulation to restore or enhance those disturbed areas that are stagnant or degrading (as indicated by erosion, denuded soils, loss of native species or diversity, non-native plant invasion, overstocked forest stands, etc).
- 1.4 Closely monitor public use and DNR activities for effects on natural, cultural and scenic resources. Where impacts are inconsistent with program goals, change or restrict use/activity. Enhance or restore site, where necessary.
- 1.5 Place administrative and public use facilities in a manner which minimizes habitat fragmentation and interference with natural processes.

## Goal Two: Maintain exceptional scenic landscapes

### OBJECTIVES

- 2.1 Design public use sites and facilities to retain natural appearance of site.
- 2.2 Plan management activities and site development to minimize visual impacts as viewed from surrounding islands, aerial and water locations, and from the mainland.

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## **Goal Three: Maintain habitat for threatened, endangered and sensitive (TES) species**

### **OBJECTIVES**

- 3.1 Give high priority to inventory, enhancement and protection of TES species habitat, as dictated by Federal law and NRCA legislative and policy goals.
- 3.2 Survey the NRCA for potential and occupied TES species habitat, routinely and following any new listings.
- 3.3 Invite other agencies/Tribes/organizations with appropriate expertise to work cooperatively in the inventory, monitoring and management of native species.
- 3.4 Use site restoration and enhancement to encourage re-establishment of plants and animals native to Cypress Island and surrounding tidelands and bedlands.

## **Goal Four: Provide opportunities for low-impact public use**

### **OBJECTIVES**

- 4.1 Provide the public with reasonable access to a sample of the outstanding vistas and natural areas within the NRCA.
- 4.2 Develop public use facilities to avoid degradation of, or impacts to, identified sensitive resources, rare habitats and contiguous forest; concentrate use (sites, trails, signs) in Minimally Sensitive Areas, existing roads, trails and developed sites.
- 4.3 Develop and maintain public use sites and trails in a manner that protects neighboring private property, the NAP and the natural and scenic values of the NRCA.
- 4.4 Establish and enforce public use at a level and to include only activities that do not detract from natural, scenic and sensitive resource protection goals.
- 4.5 Direct inappropriate public uses and use-levels away from the NRCA.

## **Goal Five: Provide opportunities for outdoor environmental education**

### **OBJECTIVES**

- 5.1 Place interpretive signing at main entry points and in high-use areas in the NRCA.
- 5.2 Use education facilities to inform the public of outstanding ecological, geologic, cultural and historic components of the island; consult with local Tribes in developing interpretive materials that address culturally sensitive resources/topics.

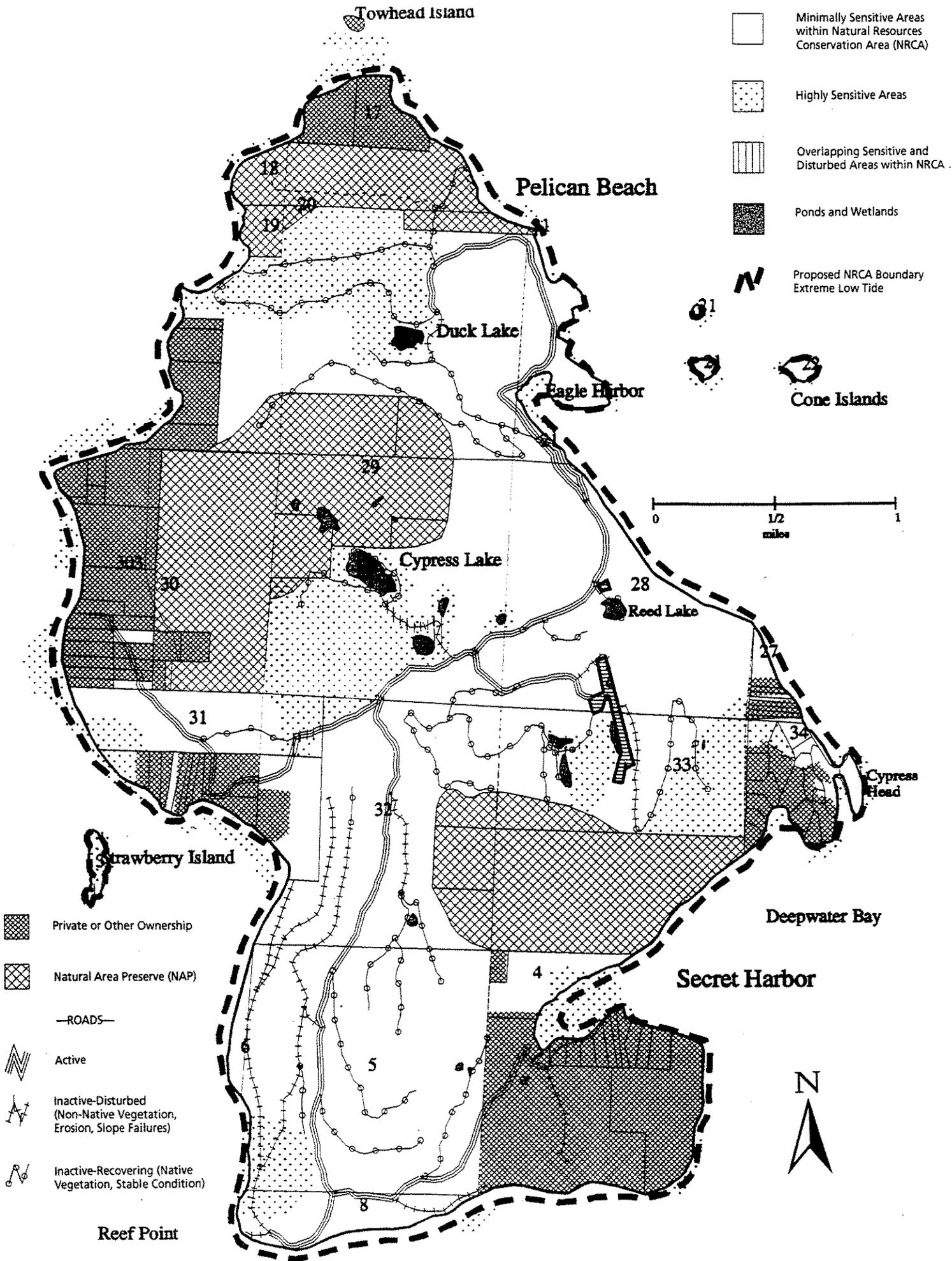
- 
- 5.3 Use interpretive information to convey a conservation ethic and enhance respect for the island and the purpose of the NRCA.
  - 5.4 Present use restrictions and regulations within the context of environmental education.

## **Goal Six: Identify and protect cultural resources on the NRCA**

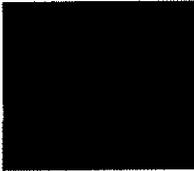
### **OBJECTIVES**

- 6.1 Survey the NRCA for archeological deposits and cultural rights (completed, 1991).
- 6.2 *Manage registered sites in consultation with local Tribes and to emphasize on-site protection, using excavation as a last resort.*
- 6.3 Work closely with local Tribes and OAHP to identify and protect as yet unknown sites.

MAP 4: CYPRESS ISLAND CONDITION OF NRCA AND MARINE RESOURCES



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# Management Plan

The Cypress Island NRCA is to be managed for the recovery and preservation of natural environmental conditions, while providing low-impact public use opportunities and environmental education.

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## Resource Protection/Enhancement/Restoration

The primary goals in managing the Cypress Island NRCA are to maintain, restore and enhance ecological systems, scenic landscapes and Threatened, Endangered and Sensitive (TES) species habitat. Natural processes will be relied upon, except where management is necessary or feasible to enhance habitat and ecosystem quality or reverse and mitigate degradation.

*Sensitive Resource Classification and Mapping (See Map 4.)*

Based on findings from preliminary studies of the island, the NRCA was divided into three categories of lands. They are:

- (1) **Highly Sensitive Areas.** NRCA lands containing highly sensitive resources which require special management attention:
  - wetlands and grassy balds, where soils and vegetation are fragile due to very dry or wet conditions
  - known and potential habitat for threatened, endangered and sensitive (TES) species
  - recorded archeological resources
  - registered water rights

The location of these highly sensitive resources are registered in the Washington State TRAX system. Managers will consult TRAX prior to site development or stewardship for details about location, sensitivity and sources of information (documents, agencies) for protecting these resources.

- (2) **Minimally Sensitive Areas:** NRCA lands that do not contain resources identified as “highly sensitive”, thought to be more self-maintaining, resilient and possibly suitable for low-impact public use.
- (3) **Marine Area:** State-owned aquatic tidelands within the NRCA boundary.

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Management strategies were developed for each area as follows.

## Highly Sensitive Areas

### MANAGEMENT EMPHASIS

Protection of known sensitive resources is the primary purpose of management in the Highly Sensitive Areas. Recreation and administrative uses will be limited or restricted, where such uses conflict with sensitive resources protection.

### Wetlands

Ponds and wetlands are focal points for wildlife and are critical to maintaining native plant and animal diversity and abundance on the NRCA. The 14 ponds and wetlands on the NRCA have been impacted in the past by development of roads, culverts, dams and weirs. Most have maintained or recovered high ecological quality (Kunze, 1992).

NRCA management will emphasize the maintenance and protection of all fresh water resources. This includes protecting the quality, timing and amount of water that flows to ponds and wetlands, as follows:

#### Meets Objectives

---

1.1, 1.2	Challenge new non-DNR water right applications on NRCA property. Minimize sedimentation and establishment of non-native plants in and around wetlands.
1.3	Re-vegetate all adjacent roads and unnatural clearings, except those necessary for DNR administrative purposes.
4.3, 4.4	Develop public access in a manner that minimizes impact to wetlands and prevents trampling of wetland soil and vegetation. Keep trails at a distance from fragile/saturated soils.

---

### Grassy Balds/Dry Forest

The grassland and grassy bald communities have been maintained by a greater fire frequency in the past and dry site conditions. These conditions, plus shallow soils, make grassy balds highly susceptible to non-native plant invasion, trampling and erosion. The sparse vegetation of dry forest communities often re-establishes more slowly after disturbance than on moister sites with deeper soils. Surface runoff and erosion are more likely to occur on steep slopes.

DNR will make every effort to minimize or eliminate non-native plants, loss of native vegetation and soil compaction/erosion in grassy balds and dry forests. Fire management will be studied and, where appropriate, applied to maintain high-quality grassland and bald communities.

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### Meets Objectives

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- 2.1, 4.2, 4.3, 4.4 Avoid developing public access near grassy balds. If access is necessary, effectively route foot traffic to minimize trampling of vegetation.  
Minimize new trail development in dry forest, and avoid trail construction on steep slopes.
- 
- 1.4 Monitor areas for soil erosion, compaction and establishment of non-native grasses and shrubs in grasslands and grassy balds.
- 
- 1.3 Prevent or control the establishment and spread of non-native grasses and shrubs in grasslands and balds.
- 
- 1.1, 1.2 Address maintenance of grassland communities as part of the long-term fire management of the NRCA (see Fire Management).
- 

### Critical Habitat

Two Threatened, Endangered or Sensitive (TES) species have been identified on the Cypress Island NRCA. The rich and varied habitat on the NRCA indicates that other protected species might reside or establish there. Loss of habitat is the major cause of plant and animal extinction, making the Cypress Island NRCA particularly important as one of the largest protected areas of contiguous forest, wetland, grassy bald and rock outcrop in the San Juan Islands. Some wildlife species are easily disrupted by human presence, particularly during reproductive seasons.

Unique habitats, such as large standing dead trees (snags) and other components of the ecosystem found to be important in the life cycle of locally rare and TES species, will be protected and maintained, as follows:

### Meets Objectives

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- 3.2 Periodically survey the NRCA for newly listed TES species and TES species suspected to inhabit the NRCA.
- 
- 3.4 Develop a plan to encourage the reintroduction and protection of identified TES species, where appropriate.
- 
- 3.3 Work cooperatively with agencies that provide the expertise and enforcement powers necessary to successfully protect TES species.
- 
- 1.5, 4.2 Protect habitat by minimizing and clustering the development of trails and facilities on the NRCA.
- 
- 4.2 Close or restrict public use in critical habitat as required to protect the habitat.
- 
- 4.3 Effectively route public use away from unique and fragile habitats.
- 

### Cultural Resources

The Cypress Island NRCA is known to contain seven prehistoric sites, several of which are being eroded by natural processes. The remaining sites are vulnerable to damage by public use. These sites are nonrenewable, non-restorable resources and are protected under RCW Title 27 as promulgated by OHAP.

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Monitoring systems have been established to identify the cause, extent, and trend of disturbance. The highest priority in cultural resources protection is maintaining archeological and historic sites and artifacts in their existing condition, usually through site stabilization. Excavation may be necessary where irreversible degradation or loss is occurring.

The Department will consult with local Tribes in the cultural resources management and environmental interpretation of cultural history and artifacts.

---

**Meets Objectives**

- 
- |          |   |
|----------|---|
| 4.3, 4.4 | Develop trail systems that guide public use away from cultural sites that are vulnerable to human disturbance.  |
| <hr/>    |   |
| 6.2      | Stabilize any cultural sites which are suffering human disturbance or progressive natural disturbance.<br>Adhere to the regulations promulgated by OAHF and consult with local Tribes on the appropriate management of cultural resources.<br>Where advised, salvage those disturbed sites that cannot be stabilized. |
| <hr/>    |   |
| 5.2, 5.3 | Provide interpretive opportunities that encourage visitors to appreciate and respect cultural history and artifacts in a manner that does not identify the locations of deposits; invite local Tribal review of interpretive plans.   |
- 

**Registered Water Rights**

Secret Harbor Schools has the only DOE-registered water right on the NRCA, consisting of a spring in section 4. Several water rights registered on private land divert water from streams that drain from NRCA property. Aquatic systems and associated habitat depend on unaltered timing, quantity and quality of water.

The Department will use practices that protect the timing, quality and quantity of surface waters on NRCA property and waters that flow to private property downstream.

---

**Meets Objectives**

- 
- |               |   |
|---------------|---|
| 4.3, 4.4      | Route public use away from any approved water rights (e.g. the Secret Harbor School water system).<br>Limit public use in the Cypress Lake/Stella's Marsh drainage to minimize impacts on downstream water quality.         |
| <hr/>         |   |
| 5.1, 5.3, 5.4 | Provide environmental education opportunities for visitors to Cypress Lake and Stella's Marsh, to discourage uses that potentially degrade water quality.   |
| <hr/>         |   |
| 4.4           | Require the removal of unauthorized water systems from NRCA land, and monitor the NRCA perimeter to prevent the establishment of new trespasses.<br>Challenge new non-Department water right applications on NRCA property. |
-

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## Minimally Sensitive Areas

### MANAGEMENT EMPHASIS

Emphasis in site development and management will be on protecting, restoring and enhancing the ecological, scenic and habitat values of the NRCA. Public use should be allowed only where impacts to wildlife and vegetation can be mitigated, monitored and controlled.

#### Meets Objectives

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- 1.2, 1.5, 4.2, 4.3 Reduce habitat fragmentation by maintaining as few roads and trails as possible. Protect the old growth corridor recommended by the Natural Heritage Program (NHP) (see Conceptual Plan).  
Develop trails on existing roads, where feasible. Route public use away from private property, NAPs and protected resources in the Highly Sensitive Areas.  
Use existing disturbed areas for fire control, public use facilities and management operations, where feasible.
- 
- 4.3, 4.4 Identify and enforce areas in the Minimally Sensitive Area, where public can bring pets on leash only with minimal impact on island flora and fauna; consult with local Tribes to designate pet area locations.
- 
- 1.2, 1.3, 1.5, 3.4 Close all existing roads on the NRCA except those needed for Department administrative purposes and those road segments which are the subject of legally recorded easements. Remove drainage structures as necessary after engineering review; install cross ditching to minimize erosion; encourage re-establishment of native plants.  
Monitor and control the establishment and spread of non-native vegetation along operational roads, trails and facilities.  
Use the lowest impact techniques available to effectively control invasive, non-native plants. (Where necessary and prudent, this may include the use of herbicides.)  
Research and implement techniques to promote more complex stand structure and original site conditions in recovering forests.  
Use only native plant stock from local sources in site restoration projects.
- 

## Marine Area

### MANAGEMENT EMPHASIS

Management of marine resources will be conducted in accordance with RCW 79.90 - 79.96 and the NRCA goals and objectives identified in this plan, and include: Protecting the island ecosystem; and providing important opportunities for research, education, recreation and scenic appreciation.

A phased approach will be used to assess and include marine areas in the NRCA. In Phase I, via this management plan, tidelands only will be included in the NRCA. Approximately 50% of the tidelands adjacent to uplands are state-owned. In Phase II, DNR will conduct an assessment of the state-owned bedlands adjacent to the Cypress Island NRCA tidelands. Those bedlands having particular resource sensitivity, such as eelgrass beds, will be added to the NRCA.

More in-depth study of the NRCA marine habitat is needed (see also Appendix C), including the rate and potential impacts of shellfish harvest on public tidelands. In the meantime, DNR is committed to protecting the bedlands and tidelands surrounding Cypress Island, as follows:

**Phase I**

**Meets Objectives**

5.1, 5.3, 5.4	Develop a public education program on the NRCA to encourage non-consumptive appreciation of the marine environment and discuss DNR's role in marine stewardship; consult with local Tribes, agencies and other experts, where appropriate.
1.4, 4.3, 4.4	Develop access, and enhance existing shoreline access to NRCA uplands in consultation with local Tribes and only where public use does not conflict with resource values or private ownership.
1.5, 4.3	Manage upland water and terrestrial resources to minimize deposit of sediment into the marine environment.
4.3	Install public moorage in consultation with local Tribes and only on public aquatic lands that do not front private property.
1.4, 1.5, 4.3	Allow private or community structures on state owned aquatic lands if the proposal conforms to the Skagit County Shoreline Master Plan and is consistent with the goals and objectives of this plan.
1.4	Allow current authorized uses on State owned aquatic lands to continue when consistent with the Aquatic Lands Act and agency reviewed environmental monitoring. Currently existing uses and structures may be reconfigured within their lease area or lease boundaries may be adjusted to accommodate best management practices in the future.
1.4, 3.3	Work with WDFW and local Tribes to develop marine hunting and fishing, that is consistent with the NRCA goals and objectives.

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## Phase II

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### Meets Objectives

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|-----------------------------|--|
| 1.4, 3.2, 3.3,<br>79.71.070 | Survey and monitor marine substrates and associated communities using standard methods approved by local Tribes and WDFW. Results should be entered into WDFW database and shared with Tribes. Rely upon Department and volunteer resources, where possible. |
| 1.5, 4.3, 4.4               | Minimize impacts to known eelgrass and kelp beds by controlling moorage practices. (This may include installation of buoys.)   |
| 1.4, 3.3                    | Work with WDFW and local Tribes to develop marine hunting and fishing, that is consistent with the NRCA goals and objectives.  |
- 

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## Public Use

Goals of the NRCA program include low-impact public use and environmental education. Public use of the Cypress Island NRCA will be encouraged in existing developed and Minimally Sensitive Areas. Public use levels and activities that do not detract from protection of the natural and scenic qualities of the NRCA will be allowed.

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### Allowable Uses

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#### Meets Objectives

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- |          |   |
|----------|---|
| 4.2, 4.4 | The following public uses are allowed in the <b>Minimally Sensitive Areas</b> , however, DNR reserves the right to restrict or prohibit any use where such use causes unacceptable resource degradation (with the exception of Tribal activities, see "Tribal Use," below): <ul style="list-style-type: none"><li>■ Hiking on trails designated by DNR</li><li>■ Swimming</li><li>■ Camping in sites developed by DNR</li><li>■ Incidental mineral collecting with no disturbance to vegetation, soil or water</li><li>■ Hunting and fishing, for the administrative purpose of maintaining wild native animal populations and as regulated by WDFW and local Tribes</li><li>■ Climbing without gear</li><li>■ Leashed pets in areas designated in the Minimally Sensitive Area</li></ul> |
| 4.4      | DNR takes a conservative approach and limits allowable public use in <b>Highly Sensitive Areas</b> to the following. These are subject to change if determined to degrade NRCA resources. <ul style="list-style-type: none"><li>■ Hiking with seasonal restrictions on trails designated by DNR</li><li>■ Fishing, for the administrative purpose of maintaining wild native animal populations and as regulated by WDFW and local Tribes</li></ul>   |
-

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## Prohibited Public Uses

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### Meets Objectives

- 1.4, 4.4      Some public uses are not compatible with the scope and character of Cypress Island NRCA. When done frequently or by enough visitors, these activities are expected to introduce impacts (noise, velocity, non-native plant seed dispersal, etc) that would prevent DNR from successfully implementing the legislated conservation goals of the NRCA. Prohibited uses include, but are not limited to:
- Recreation with vehicles (motorized or non-motorized), including bicycles
  - Riding stock, pack animals
  - Competitive events
  - Organized festivals or events attracting large crowds (more than 25 participants/observers)
  - Any activity that DNR determines to be unsafe, destructive, disruptive, or in conflict with the management goals of this plan.
- 

**Any use not specifically allowed in this plan is disallowed, except by temporary permit granted by the Department according to the following criteria for “Conditional Uses.”**

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## Conditional Uses

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### Meets Objectives

- 1.1, 4.4      DNR may grant exceptions by temporary permit when the proposed use is proven to meet all of the following criteria:
- Poses no threat to protected sensitive resources
  - Does not compromise or degrade ecosystems and resources on the NRCA
  - Provides a net benefit to the NRCA program
  - Does not deprive the general public access to or enjoyment of the NRCA
  - Does not detract from the general public interest
- 

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## Tribal Use

In consultation with local Tribes, DNR will develop guidelines for Tribal uses. These include but are not limited to ceremonial and subsistence hunting and gathering.

**FIGURE 3. KEY PUBLIC USE DECISIONS**

<b>Activity</b>	<b>Decision</b>	<b>Justification</b>
Mountain biking	prohibited	(1) Limited miles of road on the NRCA tempt bikers to go off-road and off-trail, in conflict with NRCA conservation goals; (2) Velocity of bicycles conflicts with more popular use of roads as hiking trails on the NRCA; (3) Low demand for use.
Pack animals	prohibited	(1) Low or no demand for use; (2) Animals potentially bring non-native plant seed to the NRCA and impact water quality and soils.
Pets	allowed on leash in designated areas	(1) Pets are potentially damaging to wildlife designated area and vegetation, but they provide companionship, safety and vision-assistance; (2) Only some areas within the Minimally Sensitive Areas will be designated for pets on leash only; regulations will be strictly enforced.
Hunting	allowed, as determined by WDFW/local Tribes	(1) Hunting will be used to maintain a wild deer population on island at appropriate numbers; (2) Department will work with WDFW to develop and enforce protection strategies for other game species on the island.

## Outdoor Environmental Education

Environmental education will be developed to enhance public awareness and care for the outstanding historic, cultural, geologic and ecological values of the NRCA. Sensitive resources will be protected in the *highly sensitive areas*. Educational facilities and tours will be concentrated in the more resilient *minimally sensitive areas*, wherever possible. Interpretive materials that include Tribal culture and history will be developed in consultation with local Tribes.

Environmental education will be a central theme in site development and will be designed to meet the following objectives.

### Meets Objectives

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5.2, 5.3	Inform the public of the variety and sensitivity of natural features, native species and ecological processes of the Cypress Island NRCA and western Washington lowland/island ecosystems.
5.3, 5.4	Sensitize the public to potential human impacts on fragile features. Present NRCA maps and regulations, conservation goals, history of protection and the role of the Department in resource conservation.
5.1	Place education facilities at legal entry points and acceptable public use locations. Identify off-island opportunities to provide interpretive information about the Cypress Island NRCA.
3.3, 5.3	Work cooperatively with local Tribes, other natural resource agencies and/or private institutions to develop appropriate interpretive materials and activities.
5.2, 5.3	Include local ecology, natural history, Tribal culture and history, post-settlement history, geology, and Department conservation activities in environmental education subject matter.
5.4	Inform the public of the primitive nature and lack of support facilities in the NRCA.

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## Commodity-based Activities

### Meets Objectives

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1.1, 1.2, 4.4	Grazing, agriculture, aquaculture, mining, oil and gas exploration are generally inconsistent with the management goals and emphasis of the Cypress Island NRCA, as presented in this plan. DNR will review all applications for commodity-based activity using the criteria listed under Conditional Use.
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## NRCA Administration

Administrative activities will be conducted throughout the NRCA after careful evaluation in the context of program goals. These activities include:

- Development and maintenance of facilities
- Emergency response plan, law enforcement
- Tribal cultural practices
- Research and monitoring
- Fire, fuel modification
- Timber harvest to accomplish program goals
- Live trapping/wildlife management

The primary goal of NRCA administration is to rejuvenate and protect sensitive resources and attract public use to Minimally Sensitive areas. Highest priority should be given to areas where degradation and sensitive resources occur in the same location.

More will be learned about sensitive resources on the island and surrounding tidelands and bedlands, and NRCA management strategies will be adjusted to reflect this new information. In the meantime, DNR will:

### **Meets Objectives**

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1.5, 4.2	Develop facilities for operations and public use, focused at Eagle Harbor and Reed Lake until other property determined to be suitable for such use is acquired. [Eagle Harbor will be the advertised entry point for the NRCA.] Consider the Americans with Disabilities Act (ADA) Standards in site development. Consult local Tribes on public use facilities locations and content of interpretive materials; provide layouts, plans and work schedule.
1.1, 3.1, 79.71.070	Evaluate new property added to the NRCA through donation or purchase for sensitive resources, and manage according to the recommendations outlined in this plan.
1.4, 4.4, 5.3	Provide an adequate custodial presence (at least nine months per year) on the NRCA to work on stewardship projects, environmental education and law enforcement.
1.5, 4.2, 4.3	Locate public use facilities (trails, interpretive signing) in disturbed and Minimally Sensitive areas to relieve use pressures in the Highly Sensitive Areas. As state-owned bedlands are added to the NRCA place buoys, as needed, to reduce impacts to sensitive aquatic resources.
1.5, 3.1, 3.4, 4.3	Cluster operational roads, trails and buoys to minimize fragmentation of habitat on and surrounding the island; adopt the NHP-recommended old growth corridor in facility planning (see Conceptual Plan).
2.1	Use unobtrusive colors, materials and placement of facilities/signs to protect scenic value of site.

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1.1, 1.2, 1.5, 4.3, 4.4	Identify and enforce “Leashed pet areas” within the Minimally Sensitive Area, where public can bring pets, on leash only; consult with local Tribes in designating pet use locations.
1.5, 4.1, 4.3	Avoid leading NRCA visitors to private land and NAPs via the public trail system. Require private owners on the island to use designated public entry points, not private individual accesses into the NRCA.
1.1, 1.5, 4.1, 4.3	Close existing access routes on DNR managed land which are unsuitable for public use or conflict with NRCA management guidelines.
1.1, 1.5, 4.4	Limit vehicular traffic to DNR administrative vehicles only. Phase out use of administrative vehicles after a needs assessment. Prohibit all non-DNR vehicles on the NRCA, except those authorized by DNR for emergency or conditional use.
1.4, 4.1, 4.4	Consider the use of a reservation system to regulate and distribute overnight use for the season when use exceeds capacity.
1.4, 4.4, 4.5	Coordinate with user groups and tour guides to reduce impacts and conflicts arising from group use.
1.1, 1.5, 3.1, 3.4 4.1, 4.3, 4.4	Permanently prohibit use of the airstrip (except as a helispot for DNR emergency use only), and re-vegetate using native species.
1.2, 3.3, 4.4	Work cooperatively with the Washington State Department of Fish and Wildlife (WDFW) and local Tribes to develop regulations for hunting and fishing. Develop and enforce policies for maintaining a wild deer population; protect all other wildlife species in a manner that conforms to the guidelines of this plan.
1.3, 1.4, 4.3, 4.4	Address monitoring in each proposal for recreation site development, stewardship or administrative action on the NRCA; consult with local Tribes and other appropriate agencies and organizations.

## Fire Management

### Ecological Management

The fire history of Cypress Island has not been studied in detail, but features of the grassy balds and other plant communities on the island are known to have been shaped in the past by (and are dependent today on) a greater frequency of fires.

The Department will conduct the following in consultation with local Tribes and appropriate agencies/organizations:

#### Meets Objectives

1.1, 1.2, 1.3	Study the history of fire on the island and make recommendations for mimicking the effects of natural fire in the landscape of the NRCA. Use prescribed burning to implement fire study recommendations and to maintain and enhance native plant communities, where feasible.
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## Fire Suppression and Prevention

Suppression of wildfire on Cypress Island is the responsibility of DNR acting through the Northwest Region office in Sedro-Woolley.

DNR is committed to the following:

- DNR's priority for fire suppression shall be to protect lives first, then property, then resources.
- Every reasonable effort will be exerted to prevent fire on State land from spreading to private property.
- DNR and Skagit County Fire Marshal will encourage private owners on Cypress Island to form a Fire Protection District. DNR will work with private owners to develop a community fire protection plan and lines of communication for emergency response.
- A series of remote helispots will be maintained at appropriate locations. If necessary, heliports will be constructed along an administrative road from the vicinity of Duck Lake to the vicinity of Reef Point with spurs to the airstrip and DNR compound.

### Meets Objectives

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- 1.4, 1.5      Fire fighting guidelines will be developed to minimize impact to soil, topography and vegetation. The lowest-impact fire fighting tactics that will successfully control the fire will be used.
- During fire suppression, DNR will attempt to have a NRCA program representative available to advise the incident commander
- If a project fire camp is necessary, it will be located on a hardened site to minimize impacts, where possible.
- DNR promotes practices that reduce the probability of human-caused fires on the NRCA. A burning permit from DNR, or compliance with provisions for burning, is required to burn debris. In addition:
- The Department will consider fuel modification to reduce the possibility of wildfire in areas developed for public use.
  - Recreational fires will be restricted to appropriate facilities within developed sites.
  - Permitted and administrative vehicles used in the NRCA will be equipped with a Department-approved exhaust system.
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## Monitoring

### Critical Resources

Funding requests by DNR for NRCA operations and stewardship will include a provision for monitoring. Site development plans will include a strategy for monitoring public use and impacts/change; actions DNR will take in case unacceptable change occurs will be outlined. Research and monitoring projects require prior review and approval by DNR (see Appendix C for Monitoring Techniques and Research Needs).

Monitoring plans will be developed before stewardship and site development proceed. Results will be shared with local Tribes.

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Two types of monitoring the Department will address are:

- Ecological monitoring
- Public use monitoring

A partial list of monitoring needs has been developed for the NRCA:

**Meets Objectives**

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- |          |  |
|----------|--|
| 6.2      | Condition of cultural resources (in progress)  |
| 3.1, 3.2 | Use of habitat and habitat needs of identified TES species   |
|          | Condition and occupation of potential habitat by TES species, particularly in prime areas such as old growth forest patches and talus cliffs |
- 

**Public Use**

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**Meets Objectives**

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- |               |   |
|---------------|---|
| 1.4, 4.3, 4.4 | Visitor use in Minimally and Highly Sensitive Areas<br>Public opinion about management of the NRCA<br>Use levels and impacts to public use infrastructure<br>Occurrence and impacts of unauthorized use/trespass<br>Impacts to the marine area due to unregulated use |
| 2.1,2.2       | View shed aesthetics  |
- 

**Ecosystem Condition**

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**Meets Objectives**

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- |               |   |
|---------------|---|
| 1.1, 1.4, 1.5 | Occurrence and change in habitat and community types throughout the NRCA, including degradation (soil compaction/erosion, non-native plant establishment/spread), recovery/re-generation and use of habitat by native species.<br>Condition of previously altered sites (degrading/recovering); success of restoration projects and natural recovery.<br>Pattern and causes of fire; effects of suppression on fire-dependent ecosystems. |
|---------------|---|
- 

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## **Law Enforcement**

DNR staff will be responsible for enforcement of fire regulations, trespass, and public use regulations on the NRCA (RCW 43.30, 76.04 & 79.01)

**Meets Objectives**

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- |                            |   |
|----------------------------|---|
| 1.4, 4.3, 4.4,<br>5.3, 5.4 | Enforcement will emphasize legal interpretation and voluntary compliance whenever possible. In the event of violations of game laws or other serious crimes, DNR will seek cooperative assistance from the Department of Fish and Wildlife, Skagit County Sheriff, Tribal Fish and Wildlife officers, Washington State Patrol, or other available officers.<br>The NRCA caretaker will be on-island during nine months each year. The caretaker will be trained in law enforcement and granted police |
|----------------------------|---|

Erratum: A line of type was omitted from the bottom of page 34 in the June 1996 Cypress Island Natural Resources Conservation Area Management Plan.

The final line should read (omitted language in bold italics): The caretaker will be trained in law enforcement and granted Police ***Powers and Forest Warden's Commission enabling the individual to . . .***



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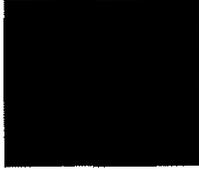
enforce applicable RCWs and regulations, not to include violation of Treaty activities.

DNR will continue to work with Secret Harbor Schools and the local community to address concerns of Cypress Island residents, DNR and visiting public.

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# Conceptual Development Plan

Maps 5 and 6 combine current NRCA and NAP ownership on Cypress Island with the goals and strategies presented in this plan. These maps are conceptual and are intended to give the reader a visual image of the application of the terms of this plan to the NRCA.

The Facilities Master Plan (map 5) shows the locations of proposed new trail construction, roads to be converted to trail, interpretive signing and new buoys, plus existing trails, campgrounds and toilets.

New trail construction is planned in two locations to:

- Connect Cypress Head campground with the airstrip, providing a needed alternative to the highly sensitive Eagle Cliff trail and popular Pelican Beach campground;
- Provide suitable access from Strawberry Bay to the main trails in the Cypress Lake Basin.
- All other trail improvements will occur on existing roads.
- The main road shown here will be maintained according to the terms of this plan; all other roads (not shown) will be abandoned (see Minimally Sensitive Area Management and NRCA Administration).
- Buoys will be installed to reduce impacts from moorage in Eagle Harbor, a popular spot for boaters (see Marine Area Management).

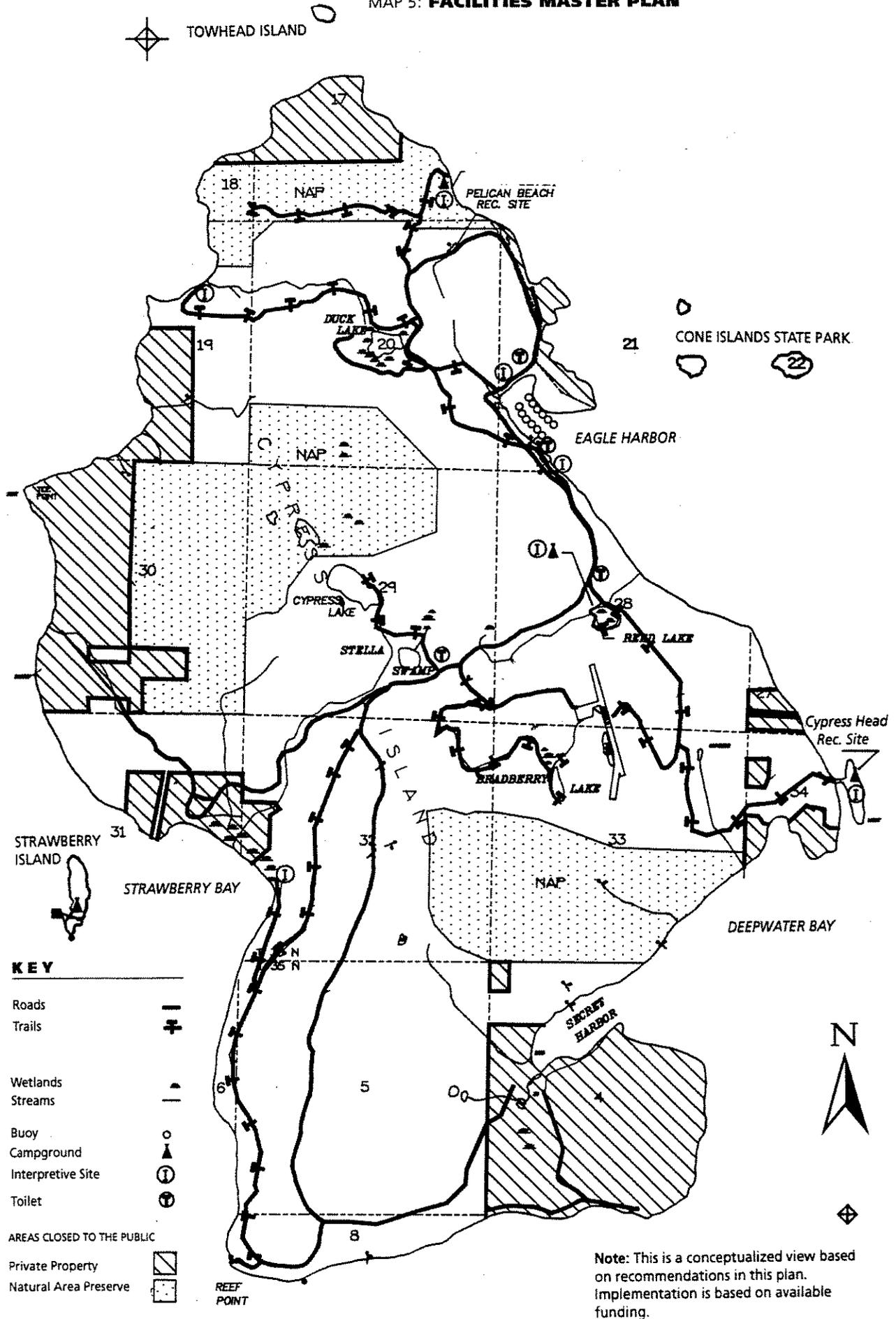
[Note: Interpretive signing will greet visitors at all major entrances to the NRCA; interpretive information also will be available at the compound, and an interpretive trail will be installed on an old skid trail around Reed Lake (see Outdoor Environmental Education.)]

The Old Growth Management Unit on the NRCA (map 6) is dedicated to maintenance of a contiguous forest canopy and development of old growth characteristics between the southern two units of the Cypress Highlands NAP (Sheehan, et al 1992).

- Public use and environmental education facilities will be developed and allowed in the Old Growth Management Unit.
- Activities that create new gaps in the forest canopy, such as new campground development and prescribed fire, will be avoided.
- Old growth characteristics will develop naturally over time and will be encouraged through ecological management, where feasible.

[Note: The existing compound and main road from Eagle Harbor to Reef Point do not interfere with protection of this unit, but expansion of these areas or new development that would create forest canopy gaps within the unit will be avoided.]

MAP 5: FACILITIES MASTER PLAN

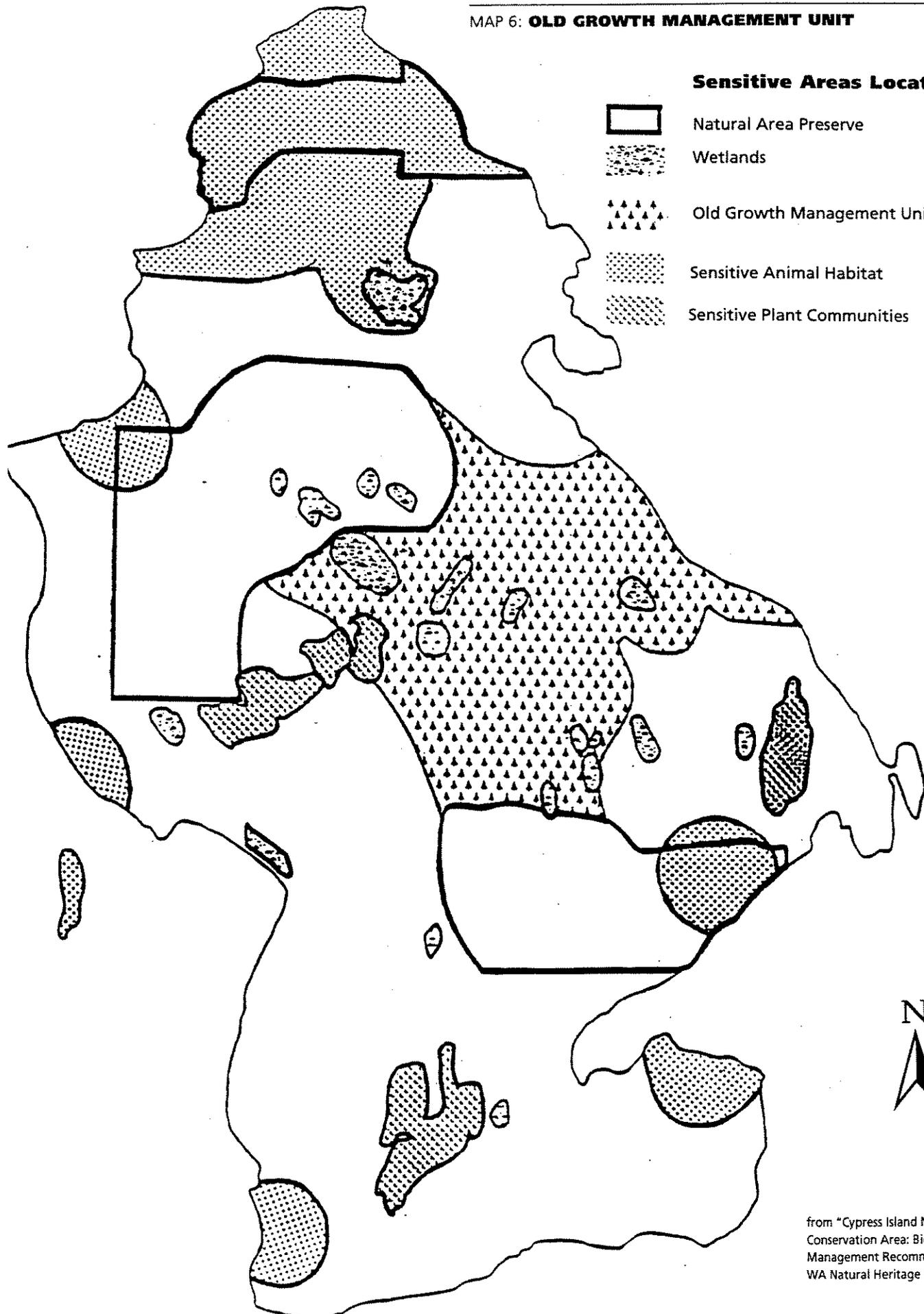


Note: This is a conceptualized view based on recommendations in this plan. Implementation is based on available funding.

MAP 6: OLD GROWTH MANAGEMENT UNIT

**Sensitive Areas Locations**

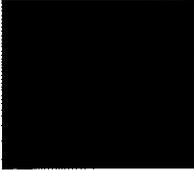
-  Natural Area Preserve
-  Wetlands
-  Old Growth Management Unit
-  Sensitive Animal Habitat
-  Sensitive Plant Communities



from "Cypress Island Natural Resources  
Conservation Area: Biological Inventory and  
Management Recommendations,"  
WA Natural Heritage Program, 1992.



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# Glossary

**Aquatic Lands:** All state-owned tidelands and beds of navigable waters.

**Bedlands:** Those lands lying waterward of and below the line of extreme low tide.

**Biological Diversity:** The various plant and animal species representative of and native to a site. "Regional biological diversity" is protected when habitat is provided to species that are becoming locally rare due to loss of habitat.

**Critical Habitat:** Those areas necessary for the survival of threatened, endangered, sensitive species, as designated under the Federal Endangered Species Act and Washington State Forest Practices Rules.

**Cultural Resources:** Archeological and historic sites and artifacts, whether previously recorded or still unrecognized, as administered by OAHF and protected under Title 27 RCW.

**Ecosystem:** All living and non-living components in the landscape. The boundaries are drawn by the observer.

**Enhance:** To intentionally re-create elements that existed on site before disturbance, or introduce new functions or characteristics to a site.

**Grassy Balds:** Landscape feature characterized by grass, forbs, moss and lichen and relative absence of trees and shrubs, resulting from a combination of factors, including shallow soil, dry site conditions, steep topography and fire.

**Habitat:** The components of the ecosystem upon which a plant or animal species relies for its life cycle.

**Highly Sensitive Areas:** On the NRCA these are land and/or water containing features such as fragile soils (grassy balds, wetlands), cultural deposits, habitat for TES species and other areas where special management attention is needed to ensure that the legislative mandate to protect such resources is being met.

**Interagency Committee for Outdoor Recreation (IAC):** A state agency that serves the park, recreation and conservation needs of the citizens of Washington state.

**Low-impact Public Use:** Those "public recreation uses and improvements that do not adversely affect the resource values, are appropriate to the maintenance of the site in a relatively unmodified natural setting, and do not detract from long-term (natural) processes." (RCW 79.71.030)

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**Maintain:** To protect natural site characteristics and ecosystem processes, such as wildlife habitat, soil conservation and succession of native plant communities.

**Minimally Sensitive Areas:** Land and/or water on the NRCA that does not contain the identified sensitive resources which are protected in the Highly Sensitive Areas. While the entire NRCA is protected under RCW 79.71 and subsequent policy guidelines, inventory of the NRCA showed that these areas contain resources that are thought to be more resilient and not as easily impacted by public uses allowed in this plan.

**Mitigate:** To minimize or compensate for potential adverse environmental impacts.

**Monitor:** To collect and analyze data for the purpose of answering management questions. A baseline is established and periodic measurements are taken to determine the extent and rate of change over time. Topics include: Beneficial and negative impacts of stewardship activities, natural events and public use.

**Natural Area Preserve (NAP):** Lands managed by DNR for the protection of outstanding examples of native ecosystems and TES species in Washington state.

**Natural processes:** Phenomena that shape the landscape's appearance and habitat potential. On Cypress Island, natural processes include: Forest succession, windthrow in forest stands, decomposition of large standing and fallen dead wood (by birds, invertebrates and fungi), slow accumulation of organic material in and transformation of wetlands, relatively free movement of wildlife among a dynamic mosaic of the island's terrestrial and marine habitats, periodic fire.

**Natural Heritage Program (NHP):** The staff of natural resources scientists that provides scientific expertise to DNR.

**Natural Resources Conservation Area (NRCA):** Designated under RCW 79.71, lands with scenic, natural and public use values as described in RCW 79.71.020. NRCAs are managed by DNR for the conservation purposes of: Maintaining, restoring and enhancing ecological systems, including habitat for state and federal listed Threatened, Endangered and Sensitive species; protecting scenic values; and where resource protection is not compromised, providing low-impact public use and environmental education opportunities (RCW 79.71.030). Management plans are to be developed for each NRCA identifying resources to be protected and opportunities for public use and environmental education (RCW 79.71.070).

**NRCA Boundary:** A mapped boundary established by public hearing encompassing significant resources that DNR has an interest in protecting, as described in RCW 79.71.020: "(1) Lands identified as having high priority for conservation, natural systems, wildlife and low-impact public use values; (2) An area of land or water, or land and water, that has flora, fauna, geological, archaeological, scenic, or similar features of critical importance to the people of Washington and that has retained to some degree or has re-established its natural character; (3) Examples of native ecological communities; and (4) Environmentally significant sites threatened with conversion to incompatible or ecologically irreversible uses." Where these resources are in private

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ownership, DNR may purchase property from willing seller. Private property and associated rights within the NRCA boundary are otherwise not affected by the NRCA boundary designation or by NRCA management.

**Office of Archaeology and Historic Preservation (OAHP):** The state agency established to document and protect cultural resources.

**Police powers:** Training and authority given to DNR staff for enforcing a series of regulations which may include: Use of state lands (RCW 43.30, 79.01), forest/mining practices (RCW 75; 76.04, .06, .09, .36, .40, .48; 77; 7844) and fisheries/wildlife (RCW 75, 77), per Department Fire Control Policy #1252, September 1991.

**Registered Water Rights:** Permitted by the Washington State Department of Ecology (DOE), water diverted for domestic use.

**Restore:** To recover natural site features and processes that existed on site prior to disturbance.

**State Environmental Policy Act (SEPA):** State law that requires administrative action (Determination of Nonsignificance or Environmental Impact Statement) for non-exempt government actions.

**Succession:** The natural changes in vegetation and animal life that occur as a plant community recovers from disturbance and proceeds to climax. In forested sites bare ground is inhabited by colonizing plants; colonizers are replaced by longer-lived shrubs and trees; and dominance of these changes with the establishment of a stable and complex system.

**Threatened, Endangered and Sensitive Species (TES):** Plants and animals protected under the federal Endangered Species Act or state designation.

**Tidelands:** Lands between the line of ordinary high tide and the line of extreme low tide.

**Uplands:** Lands above the line of ordinary high tide.

**Warden Commission:** Authority granted to DNR staff to enforce burning and debris regulations (RCW 76.04.205) and associated rules (WAC 332-24-201, -205, -211, -215, -311).

**Wetlands:** Lands where saturation with water is the dominant factor determining soil development and the types of plant and animal communities living in the soil and on its surface.



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# Appendix A – Natural Resources Conservation Areas Act

The Washington Natural Resources Conservation Areas (NRCA) Act of 1987, RCW 79.71, defines the characteristics of an NRCA as:

- Lands with a high priority for conservation, natural systems, wildlife and low-impact public use.
- An area of land or water — or land and water — with flora, fauna, geological, archeological, scenic or similar critically important features that retains to some degree or has re-established its natural character.
- Examples of native ecological communities.
- Environmentally significant sites threatened by incompatible or ecologically irreversible developments.

The act requires a management plan for each site that identifies:

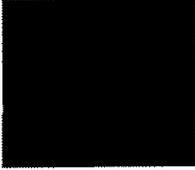
- The significant resources to be conserved.
- The areas with potential for low-impact public and environmental educational uses.
- The types of public uses that are permitted.
- The types of management activities that are permitted.

The act further defines the purposes of a conservation area as:

- Maintaining, enhancing, or restoring ecological systems, including but not limited to aquatic, coastal, riparian, montane, and geological systems, whether such systems be unique or typical to the state of Washington.
- Maintaining exceptional scenic landscapes.
- Maintaining habitat for threatened, endangered, and sensitive species.
- Enhancing sites for primitive recreational purposes.
- Outdoor environmental education.



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# Appendix B – Natural and Cultural Resources Inventory

## Archeology/History

Pre-European human influence on Cypress Island is attributed to the Coast Salish people. The Coast Salish led an ingeniously adaptive subsistence lifestyle based on the migration of Coho salmon. They lived in semi-permanent winter villages along salmon streams, but in summer they took a nomadic tour of a tribal territory. Cypress Island was one of the islands visited in the summer tour. Seasonal camps on the island were centers for hunting, fishing, gathering, and sequestering ceremonies. No indications of permanent villages on the island were found, and seasonal use subsided with the arrival of homesteaders. In the archeological survey conducted by DNR in 1990, three previously recorded sites were updated and four new sites were recorded with the Office of Archaeology and Historic Preservation (OAHF) (Wessen, 1991).

The post-contact history of the island was also investigated and recorded, beginning with the discovery of the island in 1791 by the Spanish expedition under Eliza. Early settlement and two episodes of homesteading followed. Exploitation of the island's resources included intensive offshore fishing, extensive logging and sporadic mining of chromite and olivine. The longer-term homesteaders participated in faltering attempts to provide community services on the island, including roads, schools, and postal services. Difficult access, rugged topography, and poor soils eventually caused most homesteads to be abandoned. More recently, several proposals for extensive residential development of the island bloomed and withered (White, 1991).

In 1987, DNR negotiated acquisition of the largest private landholdings on the island for the NRCA program.

## Geology/Soils

The geologic resources of Cypress Island NRCA are composed of three ancient and one modern formation. Surface geology of the southern four-fifths of the island is composed of dunite (predominantly olivine) which solidified from melted mantle 140 to 160 million years ago. Magnetic orientation of the crystal structure suggests that this formation originated at a latitude 1500 miles south of the current location. Olivine found at the surface of Cypress Island is uncommon, because this dense mineral is usually overridden by lighter rocks where tectonic plates collide at the continental margin.

As the dunite block approached the continental margin (140 to 100 million years ago) it was overridden by rocks derived from solidified silt, sand, and gravel. These rocks, known as the Lummi Group, now occur in the north end of the island. About 100 million years ago, a layer of pillow basalt arose between the dunite and the Lummi group, and the entire terrain was buried via plate tectonics to a depth of 12 miles for about 15 million years. The tremendous pressure and relatively low heat resulting from this brief burial

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metamorphosed much of the dunite into serpentine and produced pockets of chromite. The terrain was then subjected to at least two glacial episodes in the last 2 million years.

Soils that develop from the various geologic components display dramatic differences in soil chemistry, which are reflected in the biological community occupying the surface. The basalt, Lummi group, and glacial materials become fertile soils that support luxuriant plant growth. This tendency is exaggerated on Cypress Island, because these soils are located in the cooler moister aspect prevailing at the north end of the island. By contrast, soils derived from serpentine tend to be deficient in calcium and trace elements and contain enough nickel and magnesium to be toxic to some plants. This tendency is exaggerated because these soils prevail on the warmer, drier southerly aspects of the island. The sporadic occurrence of glacial deposits masks the influence of bedrock geology in development of soils on some locations on the island (NW Region, 1991).

Soils within the NRCA are loams of low productivity with significant erosion potential when disturbed (especially on slopes exceeding 30%) (NW Region, 1991).

## Water Resources

Rain, snow and fog supply the lakes, wetlands and springs of Cypress Island. About 33 inches of rain falls per year during the Region's dry summer and wet winter and spring. Lakes and ponds are found in closed depressions created in the last glaciation, which ended about 11,000 years ago. On Cypress Island there are eleven lakes and ponds (ranging in size from one to fifteen acres), a stream (Strawberry Bay Creek), and thirty-three springs. One registered water right draws water from Department-managed property, and twelve others rely upon water that originates on the NRCA. The larger ponds and lakes on the NRCA have been altered in the past by human use. Installation of weirs, dams, roads and pipes have changed water level and habitat potential. Water quality and ecological condition of these aquatic systems, however, are generally good to excellent (Kunze, 1992; NW Region, 1991).

## Island Ecology

### VEGETATION

Cypress Island is dominated by Douglas-fir (*Pseudotsuga menziesii*), a common forest species in the Puget lowlands. Yet the island's location in the rain shadow of the Olympic peninsula and its unusual serpentine-derived soils also make it home to dryland species commonly found in Eastern Washington and in more southerly latitudes: Rocky Mountain juniper (*Juniperus scopulorum*), Pacific madrone (*Arbutus menziesii*) and Shore pine (*Pinus contorta*) inhabit more exposed south-facing slopes; Rocky Mountain maple (*Acer glabrum*) is found in mixed deciduous forests with Douglas-fir and other common natives, including western red cedar (*Thuja plicata*), western hemlock (*Tsuga heterophylla*), Grand Fir (*Abies grandis*), and Big Leaf Maple (*Acer macrophyllum*).

Douglas-fir is the dominant and climax species found on most of the island. Where protected from fire and windthrow, it occurs in nearly pure stands with individual trees of up to 5 feet in diameter. Understory species include salal (*Gaultheria shallon*), ocean spray (*Holodiscus discolor*), baldhip rose (*Rosa gymnocarpa*), western swordfern (*Polystichum munitum*) and mosses. On drier sites, perennial grasses, most notably, Idaho fescue (*Festuca*

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*idahoensis*) gain understory dominance.

The island also contains a number of relatively high quality wetlands and grassland communities. Fresh water sources and rock outcrops amidst the island's large, contiguous forest, are unusual natural features in the San Juan islands and make Cypress Island important habitat for the region's native plants and animals.

Possibly due to the influence of serpentine-derived soils, at least two prominent wetlands on the island support plants that usually grow only in salt marshes: Seaside arrowgrass (*Triglochin maritimum*), slough sedge (*Carex obnupta*) and red fescue (*Festuca rubra*) are found with pond lily (*Nuphar polysepalum*), inflated sedge (*Carex vesicaria*), Baltic rush (*Juncus balticus*), Labrador-tea (*Ledum groenlandicum*) and sphagnum moss.

Grassland plants inhabit the open rocky outcrops and shallow soils found throughout the island. Often with a fragile moss and lichen layer, these special environments support Idaho fescue with red fescue (*Festuca rubra*), junegrass (*Koeleria cristata*), Pacific brome (*Bromus pacificus*) and California oatgrass (*Danthonia californica*). On disturbed sites a mix of exotic and native annual grasses gain dominance, notably hairgrass (*Aira caryophyllea* and *A. praecox*) and bromes (*Bromus tectorum* and *B. mollis*). Flowering herbs often found in this habitat are Indian paintbrush (*Castilleja* sp.), stonecrop (*Sedum spathulifolium* and *S. stenopetalum*), Death camas (*Zigadenus venenosus*) and nodding onion (*Allium cernuum*).

Non-native plant species of concern on the island include Scot's broom (*Cytisus scoparius*) at the south end; Reed canary grass (*Phalaris arundinacea*) and Tansy ragwort (*Senecio jacobea*) near Duck Lake; Soft rush (*Juncus effusus*) and Oxeye daisy (*Chrysanthemum leucanthemum*) most notably along the road from Duck Lake to Eagle Harbor; and Bull and Canadian thistle (*Cirsium vulgare* and *C. arvense*) throughout the island, particularly along roadsides, in disturbed sites and in open meadows and balds (Kunze, 1992; Sheehan et al, 1992).

## Island Ecology

### ANIMALS: MAMMALS

Due to its geographic isolation as an island, Cypress supports fewer native mammals than the western Washington lowlands. The Black tailed deer (*Odocoileus hemionus*) is the largest and possibly most influential on island vegetation. River otter (*Lutra canadensis*) and raccoon (*Procyon lotor*) are seen, and several small rodent species have been noted, including Townsend vole, white-footed mouse, wandering shrew and deer mouse. Introduced in the 1930's, the Red fox (*Vulpes fulva*) has been "naturalized" and given protected status by the WDFW.

Of the mammals that no longer inhabit Cypress Island, beaver (*Castor canadensis*) and mink (*Mustela vison*) have been reported in the San Juan Island region and were observed on Cypress Island in the recent past. Wolf (*Canis lupus*), elk (*Cervus elaphus*), moose (*Alces alces*) and black bear (*Ursus americanus*) have been extirpated from this portion of their ranges.

### ANIMALS: REPTILES, AMPHIBIANS AND INVERTEBRATES

Studies have identified several species of amphibians, invertebrates and snake in the island's protected habitat. The western toad (*Bufo boreas*), Pacific chorus frog (*Pseudacris regilla*) and roughskin newt (*Taricha granulosa*) inhabit fresh water sources on the island. Garter snakes

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(*Thamnophis sp.*) are common. Banana slugs and several species of helical land snails have been observed.

Two species of carabid beetle occur in abundance on the island. *Nebria virescens* has been found only on Cypress Island in a survey of the San Juan and Gulf Islands; *Bembidion sp.* is more common in the San Juan Island region but most abundant on Cypress Island. Butterflies, moths and dragonflies are abundant; the showier species include red admirals (*Vanessa atalanta rubia*), western tiger swallowtails (*Papilio rutulus rutulus*), pale tiger swallowtails (*Papilio eurymedon*) and the Polyphemus moth (*Antheraea polyphemus*).

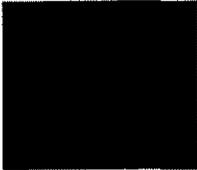
#### **ANIMALS: BIRDS**

The San Juan Islands support more than 200 species of shore, wetland and forest resident and migratory birds. Of the 120 species observed in the vicinity of Cypress Island, almost half are marine birds, such as great blue heron, pigeon guillemot, glaucous-winged and bonaparte gulls, grebes, loons, cormorants, scoters, mergansers and buffleheads. Waterfowl found wintering and nesting on island include buffleheads, green-winged teal, mallards and wood duck.

Warblers, winter wrens, finches, flickers, thrushes, kinglets, juncos, chickadees and swallows nest in the island's forest habitat. Raptors observed on the island include the Turkey vulture, at the northern extent of its range, Vaux's swift, bald and golden eagles, red-tailed, Cooper's and sharp-shinned hawks and screech owl (Bill, 1991; Sheehan, et al, 1992).

#### **TES Species**

The island is home to two federally-listed threatened and endangered bird species, and the waters surrounding Cypress Island are an important feeding habitat for the threatened marbled murrelet (*Brachyramphus marmoratus*). The resident band-tailed pigeon and pileated woodpecker are identified as species of special interest by WDFW. DNR is working cooperatively with WDFW to develop and implement strategies to secure long-term protection of critical species habitat.



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# Appendix C – Monitoring Techniques and Research Needs

All research or monitoring projects must be reviewed and approved by the Department prior to commencement.

## Monitoring Techniques

Monitoring begins with establishment of a baseline measurement of resource conditions or characteristics. Periodic remeasurement gives an indication of the extent and rate of change taking place in the resource. The goal of monitoring is, over time, to identify trends and causes of change.

Questions addressed in monitoring include:

- What are existing (baseline) conditions?
- What are target conditions, if different from baseline?
- Is the site degrading, stable or progressing toward target conditions?
- How will stable or target conditions be maintained?

Monitoring indicators measured should give early warning of change, give continuous assessment over a wide range of stress, be easy and cost-effective to measure, and distinguish between natural stress and human disturbance.

Proven monitoring techniques include:

- Aerial photo analysis (landscape indicators)
- Terrestrial/marine photo points
- Visitor-use and public opinion surveys
- Rapid survey techniques
- Plots or transects

## Research Needs

Specific research questions have been identified as important to the management of the Cypress Island NRCA. DNR will keep and update this list for reference when funding and requests for research opportunities arise.

### ECOSYSTEMS

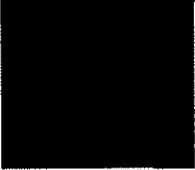
- Effect of parent material on water and sediment chemistry of wetlands, streams, ponds and lakes and associated aquatic flora and fauna.
- Population inventories of wildlife, to include bats, forest interior birds and neotropical migrants, cavity nesters, raptors, small mammals, reptiles, amphibians, larger mammals, aquatic and terrestrial invertebrates, butterflies and other insects.

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- Nest predation in edge habitat along roads and trails.
  - Snag density and snag use by wildlife.
  - Community types and condition of marine areas surrounding island, including eelgrass and kelp beds, substrate and species.
  - Condition of salt marshes and effects of human use.
  - Island vegetation to include overstory, understory woody and herbaceous species, mosses, lichen and ferns; habitat associations of vegetation with various target wildlife species.

#### **EXOTIC SPECIES**

- Species list and mapped location of all exotic plants on the NRCA.
- Introduced aquatic flora and fauna in lakes and ponds; effects of exotic fish on aquatic systems.
- Food habits, sex ratio, reproductive success and numbers of Red fox.

Sources for research staff include but are not limited to DNR staff or contracts, WDFW scientists, university faculty and students, recognized researchers requesting opportunity to do approved research, volunteers.



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