

Management Plan for Point Doughty Natural Area

Draft – February 2025

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2025 Management Plan for Point Doughty Natural Area



Why Create a Management Plan for Point Doughty NAP?

The Point Doughty Natural Area Preserve (NAP) Management Plan provides functional guidelines for the site manager and other Washington State Department of Natural Resources (DNR) staff, as well as conservation information for partners, neighbors, interested parties and the public. This plan helps to identify priorities for management of natural features and access at the site. The plan demonstrates how DNR is applying statutory and policy requirements to specific management activities for the natural area. The management objectives, actions and provisions outlined in this plan apply only to the DNR-owned lands within the preserve.

How Might the Management Plan Change Over Time?

Once approved by DNR, the plan guides future conservation land management actions within the NAP, in combination with any related implementation prescriptions or more detailed site inventory or analysis later adopted as appendices to this plan. Appendices 2 and 3 are “living” work plans with cost estimates that will be updated by DNR as changes arise with the routine management of the site and as projects are implemented or economic factors (such as inflation) require changes. Future updates to Appendices 2 and 3 will be in conformance with the policy guidance and land management goals of the plan, including any future adopted appendices.

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Glossary of Acronyms

| | |
|------|--|
| DNR | Department of Natural Resources |
| NAP | Natural Area Preserve |
| NRCA | Natural Resources Conservation Area |
| RCW | Revised Code of Washington |
| WAC | Washington Administrative Code |
| HCP | Habitat Conservation Plan |
| SEPA | State Environmental Protection Act |
| GMA | Growth Management Act |
| GEO | Governors Executive Order |
| CPL | Commissioner of Public Lands |
| WRIA | Watershed Resource Inventory Area |
| WDFW | Washington Department of Fish and Wildlife |
| WWRP | Washington Wildlife and Recreation Program |
| YEOP | Youth Education and Outreach Program (DNR) |
| EIA | Ecological Integrity Assessment |
| EO | Element Occurrence |
| DAHP | Department of Archaeological and Historic Preservation |
| | |

General Natural Area Information

Point Doughty Natural Area Preserve Location

The NAP (Figure 1a, 1b, 1c) is located at the northwestern tip of Orcas Island. The site extends from the northwestern point of the island inland along the western and northern shores. Located 25 miles northwest of the town of Anacortes, the NAP is located in:

T.R.S.: Sections 9 and 10 in Township 37 North, Range 2 West, San Juan County.

Quad Map: US Topo 7.5-minute map for Eastsound, WA (Geospatial PDF, 7.5 x 7.5 minute)

Ecoregion: Puget Trough

Access: Legal access to Point Doughty is achieved by boat. No overland access is available.

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Figure 1a. Point Doughty Natural Area Preserve Approved Boundary and Ownership

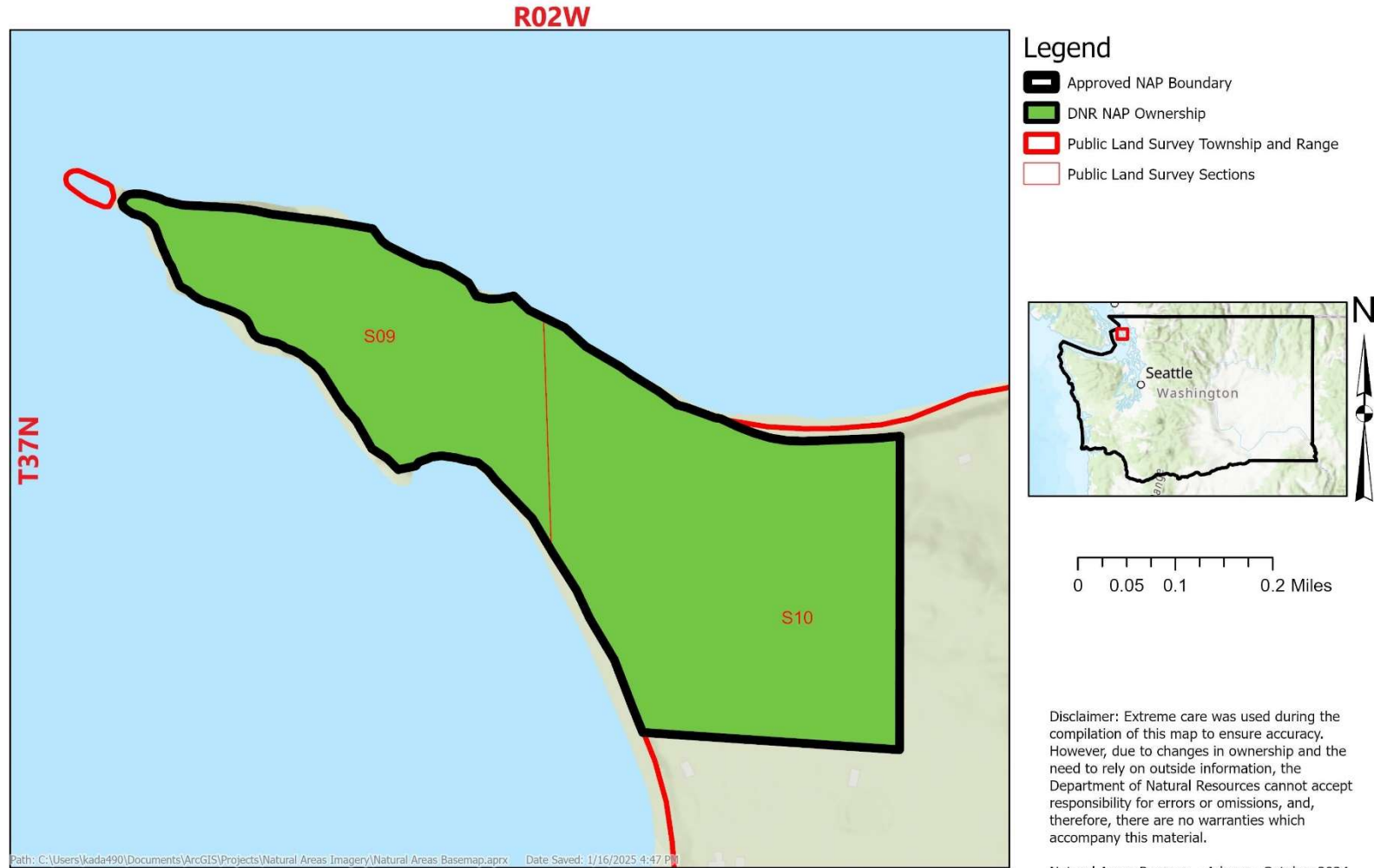


Figure 1b. The Land within the Point Doughty Natural Area Preserve is owned and managed by Washington Department of Natural Resources



Figure 1c. Landscape context of mapped rare ecosystems within Point Doughty Natural Area Preserve



Natural Area Designation

Point Doughty was designated in 1988 (Natural Areas Program, 2024) as a Natural Area Preserve (NAP) under Revised Code of Washington (RCW) Chapter 79.70, the Washington Natural Area Preserves Act. This 57-acre preserve is owned and managed by the Washington State Department of Natural Resources.

Overview of Natural Area Features

Point Doughty Natural Area Preserve protects two high-quality forest plant communities within the Puget Trough ecoregion in Washington State: Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray Forest plant associations within the Puget Trough Ecoregion in Washington State (Table 1). Both plant associations were once relatively common in the Puget Trough Ecoregion but are now designated as “imperiled” in Washington State. The NAP also protects raptor breeding areas which were originally protected when Bald Eagles were federally listed.

Agency Overview

The Washington State Department of Natural Resources (DNR) manages 5.7 million acres of forest, range, agricultural, commercial, conservation, and aquatic lands in trust for the people of Washington. State-owned upland trust lands are managed to produce revenue for various trust beneficiaries, including schools, state facilities and, in some cases, local government services. Forested trust lands within the range of the Northern Spotted Owl are managed under a multi-species habitat conservation plan (HCP). This HCP affords incidental take under the Endangered Species Act for permitted management activities while providing fish and wildlife habitat, clean and abundant water, and access to outdoor recreational opportunities. The HCP makes ecosystem-based recommendations to guide management in a way that protects habitat for at-risk species. The multispecies conservation strategy outlined within the HCP is directed at providing habitat for animal species of conservation concern as well as unlisted animal species and special landscape features identified as uncommon habitats or habitat elements. The conservation strategy identifies three objectives to provide habitat that:

- Maintains the geographic distribution of species that have small annual or breeding season home range areas.
- Contributes to the support of species with large home ranges on federal forest reserves, and
- Facilitates the dispersal of species among federal forest reserves.

DNR-managed natural areas within the range of the Northern Spotted Owl, including the NAP, are covered by the HCP. DNR-managed natural areas provide ecosystem services in the form of protection of specific types of habitat and conservation values that benefit the HCP’s conservation objectives.

As of 2024, DNR manages 169,465 acres of conservation lands at 97 natural areas throughout the state, within the Natural Areas Program. Primary management objectives in DNR-managed natural areas include conservation, research and environmental education, as well as low-impact recreation where appropriate. DNR manages two types of conservation lands, natural area preserves (NAPs, under RCW Chapter 79.70) and natural resources conservation areas (NRCAs, under RCW Chapter 79.71). Natural areas contribute to meeting requirements of the HCP for state-owned trust lands. NAPs and NRCAs in the North Puget planning unit, such as Point Doughty, provide habitat or support one or multiple life stages for various species of concern protected under the HCP.

DNR Natural Areas Program

After a site has been designated and acquired as a natural area, it is managed by the DNR Natural Areas Program, which works to fulfill DNR policies and legislative provisions under Chapter RCW 79.70 and Chapter RCW 79.71. Management objectives seek to protect the primary natural features of each natural area and provide opportunities for research, environmental education, and in many cases low impact use that is compatible with conservation objectives. Active management is necessary in most natural areas to ensure the long-term viability of the priority species and ecosystems protected within them.

State of Washington Natural Heritage Program

The Washington State Legislature recognized the need for a systematic and objective approach to guide inventory and protection efforts to protect natural features most at risk, and to efficiently focus scarce conservation resources. As a result, the Washington Natural Heritage Program was established in 1987 to provide a scientific approach to the process of identifying candidate sites for the natural areas system and to gather and share data about the state's imperiled species and ecosystems for environmental assessment, conservation planning, and land management purposes.

The program creates a biennial *State of Washington Natural Heritage Plan* that establishes the framework for a statewide register of natural areas and identifies conservation priority species and ecosystems for broader decision making.

Natural Heritage Advisory Council

The Natural Heritage Advisory Council, established by the Natural Area Preserves Act (RCW 79.70), advises DNR and other state agencies on the establishment and management of NAPs. The Council reviews and approves or rejects natural area nominations, recommends sites to the Commissioner of Public Lands or the agency directors for Washington State Parks and Recreation Commission and the Washington Department of Fish and Wildlife, and works with DNR or other state agency staff to develop management plans for established Natural Area Preserves. The Council advises DNR on management practices for the preservation and maintenance of high-quality natural areas.

Point Doughty Natural Area Preserve Management Planning Process

The Point Doughty NAP Management Plan provides functional guidelines for the site manager and other DNR staff, as well as conservation information for neighbors, interested parties and the site visitors. The plan helps to identify priorities for management of natural features and guides decision making related to access to the site. The plan demonstrates how the Natural Areas Program is applying policy and statutory requirements to specific management activities.

Limits of the Plan

The management objectives, actions and provisions outlined in this plan apply to all DNR-owned land encompassed in the preserve boundary. DNR will implement management actions as resources become available. The basis of future budget requests for maintenance and operations and periodic monitoring will reflect the objectives and actions of this plan. To develop the management plan for the NAP, DNR staff conducted ecological integrity assessments and inventories, and collected comments and input from area residents, agencies and Tribes.

Applicable Local, State, and Federal Regulations

Plans and regulatory processes that may shape and limit activities or projects that are proposed within the Point Doughty NAP Management Plan include, but are not necessarily limited to the following:

The Washington Natural Areas Preserves Act: (RCW 79.70) In passing the Natural Area Preserves Act, the Legislature recognized the need for, and benefits of, permanently designating areas explicitly for conservation of biodiversity and geological features, research, and education. The Natural Area Preserves Act authorizes DNR to establish and manage a statewide system of natural areas (the Natural Areas Register) through cooperation with federal, state and local agencies, private organizations and individuals. These designated natural areas are intended to provide critical habitat for rare and vanishing species, conserve representative examples of the state's ecosystems, and ensure the availability of places for scientific research and education. Today, this system consists of lands managed by numerous federal and state agencies as well as private conservation organizations. Because they retain much of their natural character, these natural areas serve as reference sites to learn how ecosystems function and to document ecological change in relation to natural ecological processes, thereby providing a baseline from which changes resulting from human-induced stressors or management activities (such as resource production or utilization, and recreation) can be compared.

The State Environmental Policy Act (SEPA): (RCW 43.21) SEPA requires governmental agencies to consider the environmental impact of proposals before making project decisions. Future management activities which have the potential to impact the environment, such as development of educational or recreational facilities, may require SEPA review.

The Washington Growth Management Act (GMA): Passed by the Washington State Legislature in 1990, the GMA requires all urban counties and cities to develop and adopt comprehensive plans and regulations to implement these plans. Although San Juan County, where Point Doughty is located, is not an urban county, they adopted GMA planning in 1992. The planning effort includes county-wide planning policies, land use designations (including zoning), urban growth boundaries, etc. These comprehensive plans are used to guide growth and development in a thoughtful, systematic manner. The four Comprehensive Plan elements of primary relevance to Point Doughty NAP are Critical Areas, Shoreline Master Program, Historic and Archeological Preservation and Zoning (see below) (San Juan County, 2024).

Critical Areas/Resource Ordinances: San Juan County's Critical Areas Ordinances regulate land use within ecologically sensitive areas in conformance with the GMA, designate and protect critical areas, and establish regulations that protect critical areas, based on consideration of the best available science. This includes preserving and protecting wetlands and critical marine and terrestrial wildlife habitats and wildlife corridors, including forested habitat. The GMA requires the development of regulations, based on best available science, to protect critical environmental resources (Critical Areas) and to avoid environmental impacts associated with natural hazards. These "Critical Areas" include, but are not limited to, aquifer recharge areas (where water infiltrates to aquifers), geologic hazard areas (such as steep slopes prone to landslides), important wildlife habitats and species, frequently flooded areas (such as floodplains and surfacing groundwater), and wetlands.

Shoreline Master Program (SMP): San Juan County's Shoreline Master Program incorporates low impact development standards and guidelines based on the Western Washington Stormwater Management Manual. The SMP implements regulations for critical areas, rural and resource lands, special districts, activity centers and urban growth areas which allow water-oriented recreational opportunities compatible with shoreline areas ecological functions. The SMP facilitates access to the shoreline while protecting shoreline ecological functions (San Juan County, 2017).

San Juan County Zoning: The San Juan County Comprehensive Plan was adopted in 2010 and most recently updated in 2023. The county recognizes the entire area within the Natural Area Boundary as "Natural" within San Juan County zoning (San Juan County, 2024). The adjacent properties surrounding Point Doughty Natural Area are zoned as rural farm forest. Neighboring properties are privately owned, and include Camp Orkila, a YMCA facility.

Historical and Archeological Preservation: San Juan County's Historical and Archeological Preservation [Plan] aims to protect and preserve the cultural resources of San Juan County. This section of the plan requires cultural resources reports be prepared with any development that involves ground disturbing activity, in accordance with the Washington State Standards for Cultural Resources Reporting. Cultural resources reports must be prepared by a professional archaeologist who meets the federal government Secretary of the Interior's Professional Qualification Standards and State Law (San Juan County, 2024).

Washington Governor’s Executive Order (GEO) 21- 02: GEO 21- 02 requires agencies to consult with the Washington Department of Archaeology and Historic Preservation as well as affected Tribes on the potential impacts of a project on cultural resources. The order covers state-funded construction, restoration or acquisition projects that will not undergo Section 106 review under the National Historic Preservation Act of 1966 (Section 106). It also includes grant and pass-through funding that will culminate in construction or land acquisitions.

National Historic Preservation Act (NHPA) Section 106: Any project at Point Doughty NAP with a federal nexus (such as funding through federal funds) will be required to undergo a Section 106 consultation. In a Section 106 consultation, the federal agency serves as the lead agency for the purposes of the consultation process. Section 106 of the NHPA requires that each federal agency identify and assess the effects that their actions or projects may have on historic buildings, structures, districts, objects, and archeological sites. The Section 106 consultation process begins when the lead agency consults with the State Historic Preservation Officer and the affected Tribes. During the consultation, key determinations include 1) identification of historic and cultural resources that may be affected by the project, 2) determination of any adverse effects to these resources that may occur as a result of the project, and 3) how to resolve those adverse effects by avoiding negative adverse effects and mitigating for any adverse effects that will or do occur as a result of the project.

Commissioner of Public Lands Order on Tribal Relations #201029: The Order recognizes that Native American culture is characterized by an intimate relationship with natural resources and that DNR shares a commitment with Tribes in protecting natural resources. The Commissioner’s Order seeks to build inter-governmental relationships based on trust and mutual respect as guided by six principles: Respect for Sovereignty, Interdependence, Sustainable Use, Sound Science, Transparency, and Respect for Traditional Knowledge and Cultural Values. (San Juan County , 2024).

The Watershed Management Act: The Watershed Management Act of 1998, (ESHB 2514, and RCW 90.82) required local governments to develop watershed plans for managing water resources and protecting existing water rights. The collaborative effort among city, county, and state agencies resulted in the development of management policies and recommendations for water quantity, water quality, aquatic habitat, and instream flow. Water Resource Inventory Areas (WRIAs) delineate the management units, following ecological and political boundaries within a watershed. The Point Doughty NAP is within the San Juan Islands Watershed, WRIA #2 (WA State Parks, 2024).

Preserve Description

Preserve Purpose:

Natural area preserves (NAPs) are established to protect the highest quality remaining examples of natural Washington's biodiversity. The collection of natural areas across the state (referred to as the statewide register of natural areas) provide protection for the best remaining examples of each of Washington's native ecosystems and rare species populations, as a way of preserving the state's natural heritage. Designated natural areas are intended to provide adequate representation of targeted species and ecosystems, provide opportunities for research and education, and contribute to the overall conservation of those species and ecosystems. Sites generally become candidates for Natural Area Preserve status with the discovery of a place that supports exemplary examples of Washington's ecosystems or that is extremely valuable for the continued existence of a rare species. Sites are assessed for their overall ecological condition and long-term conservation viability, in comparison with other known examples of the same species or ecosystem.

The NAP protects the few remaining occurrences of two forested plant associations within the Puget Trough Ecoregion: Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray Forest. These plant associations are considered globally vulnerable and imperiled in Washington State (Chappell, 2006). The extent to which both plant associations have been reduced is in part due to anthropogenic development, but timber harvest has been the primary driver in reducing the number of high-quality occurrences in the region.

In Washington State, there are only 15 known occurrences of Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest (Chappell, 2006). The few remaining stands of Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest types in good condition are found mostly in the northern Puget Sound ecoregion (Chappell, 2006). These few remaining occurrences of the Douglas-fir / Pacific Madrone plant association are threatened both by future development as well as fungal diseases such as *Natrassia* canker and *Fusicoccum* branch dieback (Chappell, 2006).

The Douglas-fir / Salal - Oceanspray Forest occurrence is listed as "Threatened" in Washington State. The element occurrence of this plant association within the NAP is one of 18 documented in Washington State. Most remaining examples throughout the state have been altered and reduced in extent by past timber harvest (Chappell, 2006). The element occurrence at Point Doughty is one of only a few in the state that are unimpacted by timber harvest. It was considered to be in "good" condition when assessed in 1994, shortly after the Natural Area Preserve was established. A reassessment of ecological integrity in 2024 determined the condition of the Douglas-fir / Salal - Oceanspray Forest occurrence to be in "very good" condition and the Pacific Madrone - (Douglas-fir) / Salal Forest occurrence to be in "excellent" condition.

The NAP was initially established in part to protect and support nesting Bald Eagle (*Haliaeetus leucocephalus*) populations in recovery. In 2007, Bald Eagles were delisted due to successful conservation measures, including the protection of natural habitats like those found at the Point Doughty NAP. The NAP continues to support the life cycle of this species and other raptors, including the peregrine falcon.

Pre-settlement landscapes of the San Juan Islands were likely shaped by moderate severity fire regimes, with variable severity and high frequency. Under current practices with fire mostly excluded from the disturbance regime, the proportion of Douglas-fir may tend to increase in abundance within the composition of certain lowland forest types. Alterations to historical disturbance regimes can impact species composition of sites (Chappell, 2006).

Point Doughty has a mature Douglas-fir dominated forest. Patches of less mature stands where the understory trees are usually overtopped by the canopy have lower rates of sapling regeneration in the understory (Van Pelt, 2007). Abundant regeneration of shade tolerant species such as western hemlock and grand fir indicate a history of fire exclusion. The presence of woody debris is minimal (Van Pelt, 2007). There are a few examples of remnant older trees scattered throughout the NAP that survived the fire which initiated the establishment of most of the rest of the canopy. Similarly, the 2024 EIA noted that legacy trees with charcoal present above 6 feet on bark were observed in the southeastern corner and along the northern boundary of the site (Powell, 2012).

Natural Area Design:

The boundary of Point Doughty NAP includes the entirety of DNR ownership in the vicinity of Point Doughty (Figure 1a, 1b). The Natural Area Preserve boundary was designed to protect from threats to the Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray plant associations element occurrences. The plant associations protected in the NAP may extend beyond the property boundaries. Additional assessment is necessary to make that determination. The extremely small size of the preserve and lack of landscape level protection of ecological processes important to the long-term integrity of these forested ecosystems may pose challenges for protecting the site in perpetuity.

The preserve is bounded on the southwest and north by the Salish Sea and to the east and south by private property. There is no legal overland access to the property. Likewise, DNR has no legal overland access to the property. Camping was established near the northwestern tip of the property prior to its designation as a natural area—these activities remain permissible today. Access to the site is achieved from the water.

A natural area boundary is a designation of lands eligible for inclusion within a state-owned natural area. Lands located within the boundary only become part of the natural area if they are acquired by DNR. The boundary is simply an administrative tool to indicate where DNR will work with willing-seller property owners, and it imposes no change in land use, zoning or any other restrictions on landowners. Acquisition from potentially willing sellers within a boundary is based on market value as determined by independent, third-party appraisals.

Preserve Acquisition:

The Point Doughty NAP is located in Section 10, Township 37 North, Range 2 West. Most commonly property came into state ownership via grant from the federal government, at statehood. In Washington, that process granted property in sections 16 and 36 of each township from federal to state ownership. But not all townships include sections 16 and 36. As such an alternative “Clear List” process was created to compensate for section 16 and 36 property not available for the normal transfer process. The Point Doughty property came into state ownership in 1962, by way of the “Clear List” process. In 1986, the trust lands on Point Doughty supported two priority plant communities as well as active Bald Eagle nests. Following a recommendation to create the NAP in 1986, the Commissioner of Public Lands approved the transfer of trust lands to the Natural Areas Program.

Natural Features Description

Point Doughty NAP Primary Natural Features

At the time of site establishment, the 1987 Natural Heritage plan identified two Priority 1 species, two Priority 3 species and plant communities for protection in natural areas (Appendix 4). Table 1 lists the plant associations and species considered to be the “primary features” of the site (Figure 1c):

Table 1. Primary features priorities with associated NatureServe Element Codes found at Point Doughty NAP at the time of establishment ([NatureServe Explorer](#)).

| Plant Association / Protected Species | Scientific Name (Element Code) | Conservation Status |
|--|---|---|
| Pacific Madrone - (Douglas-fir) / Salal Forest | <i>Arbutus menziesii</i> - (<i>Pseudotsuga menziesii</i>) / <i>Gaultheria shallon</i> Forest (CEGL007332) | Threatened |
| Douglas-fir / Salal - Oceanspray Forest | <i>Pseudotsuga menziesii</i> / <i>Gaultheria shallon</i> – - <i>Holodiscus discolor</i> Forest (CEGL005531) | Threatened |
| Peregrine Falcon | <i>Falco peregrinus</i> | Species of Greatest Conservation Need |
| Bald Eagle | <i>Haliaeetus leucocephalus</i> | Unlisted, Protected |
| Harbor Seal | <i>Phoca vitulina richardsi</i> | Protected, Marine Mammal Protection Act |

[Appendix 4](http://www.dnr.wa.gov/PointDoughty) (available online at www.dnr.wa.gov/PointDoughty) contains the Natural Heritage Program report that includes information on site topography, geology, soils, hydrology, and additional conservation features. The State of Washington Natural Heritage Plan, which describes the conservation methodology for Natural Area Preserves, is available online at The Natural Heritage Program webpage.

A list of plant species known to occur on the site is included in [Appendix 5](#).

A list of animals/birds is included in [Appendix 6](#).

Primary Plant Communities: The majority of the site is forested. Two major forested plant associations are present: Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray Forest. Besides the narrow beach and cliffs, there is also an herbaceous bald on the northern tip of the site; that area is heavily impacted by recreational use and invasive species and does not have sufficient ecological integrity to be considered an element occurrence. Find a more detailed description of these plant communities in [Appendix 5](#).

Key Bird Species: Based on species lists obtained through eBird, there are at least 101 species documented in the vicinity of Point Doughty. A Peregrine Falcon nest site has been established on the northern cliffs of the site and these birds are commonly seen from the water.

Ecoregional Context: The Point Doughty NAP is located within the Puget Trough ecoregion. This ecoregion in northwest Washington is bordered by the North Cascades to the east, the Northwest Coast ecoregion, and the Willamette Valley ecoregion to the south. There is a high diversity of plant communities in this ecoregion, in part due to the high variability in precipitation as well as variability of sediment deposited during various periods of glaciation, glacial drift and recession (University of Washington Publications in Geology, 2006). Historically, the Puget Trough ecoregion was predominantly covered by coniferous forest types. In recent centuries, much of the region has been converted from forested land for development of housing, agriculture and other land uses.

Climate

Point Doughty is located within the “rain shadow” of the Olympic Mountains and the Vancouver Island Ranges. Winter storms moving inland over the ocean are shielded by these two ranges, making the San Juan Islands part of the driest region in western Washington (Western Regional Climate Center, 2013). Annual high temperatures range between 39 and 50 °F in the winter months and average 63 °F degrees in the warmest month of summer (Sleeter et. al, 2017). Most of the Puget Trough receives 35 inches of annual precipitation on average; mean annual precipitation in the rain shadow can be as low as 16-18 inches annually (Sleeter et. al, 2017). July and August are typically the sunniest and driest months, with maximum temperatures averaging 65 degrees near the water. November through January are the coldest and wettest months on average, with maximum temperatures in the 40s and minimum temperatures in the lower 30s(°F) (Adamus et al., 2015).

Another effect of the rain shadow is its impact on the *rate* of rainfall. While other parts of the ecoregion receive light to moderate rainfall rates on average, the San Juan Islands receive precipitation as drizzle or light rain rates as compared to the mainland (Western Regional Climate Center, 2013). Occasionally in the winter months, freezing temperatures can result in small amounts of snowfall but most precipitation falls as rain (Adamus et al., 2015).

Climate Change

Managing natural areas like Point Doughty NAP to protect biodiversity and support rare species and habitats will become increasingly important as the climate changes. The key factors which shape the environment of the NAP are shifting with climate change. Among these factors are temperature, seasonal patterns in precipitation, sea level rise and long-term trends in seasonal, annual and decadal climate variation. Since 1900 the average annual temperature in the Pacific Northwest has increased by 2°F (Reidmiller et al., 2018). Temperatures are expected to continue to increase through the end of the century, with the largest increases anticipated in summer temperatures (Mauger, 2015). Warmer winters have led to changes to the timing of the onset of spring and summer. These changes in climate are predicted to disrupt the synchronicity of biological events crucial to the reproduction and survival of plant and animal species. Consequently, plant communities and species which are already threatened or endangered may be additionally vulnerable to the threat of climate change. Creating climate adaptive management strategies for natural areas such as Point Doughty is an increasingly important part of natural areas management.

Climate models project that winter precipitation events in the Puget Trough Ecoregion will trend towards increasing intensity and frequency while summers are expected to become drier and warmer (Adamus et al., 2015). Sea levels have already risen along many shorelines and are predicted to continue to rise another four feet over the coming century (Mauger, 2015). The compounding impacts of increased severity and intensity of winter storms along with sea level rise are likely to accelerate rates of bluff erosion. While the threatened Pacific Madrone - (Douglas-fir) / Salal Forest is dependent upon periodic disturbance (fire or bluff erosion), accelerated rates of coastal erosion may pose a threat (Mauger, 2015).

Forested ecosystems have become warmer and drier in response to rising temperatures, changes in precipitation, and decreased soil moisture. These stressors are driving heightened vulnerability of forested ecosystems to insects, disease, and higher intensity fire (Reidmiller et al., 2018). Current ranges of existing ecosystems and communities are likely to change in the future, and novel systems and communities are likely to develop over time (Mauger, 2015). Therefore, climate change poses an additional threat to the continued representation of both the Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray plant associations at a regional level. The protection of the NAP may provide refugia for these threatened ecosystems.

The ecological changes driven by climate change are having profoundly negative impacts on Tribal cultures and traditional and spiritual practices by eliminating traditional foods, medicines, and connections with the ecosystem through reduction or extinction of populations. Protecting natural areas will provide refugia for natural resources and

ecosystems that are at the core of Tribal cultures. Protected from direct disturbance, these ecosystems may persist longer in natural areas, even in the face of climate change, than in the surrounding landscape. DNR acknowledges not just the intrinsic ecological value of the sites, but also the deeper values held for these ecosystems by Tribal partners. While indigenous peoples and Northwest coastal Tribes are recognized as leaders in climate adaptation, the 2024 report, *Climate Adaptation Barriers and Needs Experienced by Northwest Coastal Tribes*, names a lack of cross-agency partnership and collaboration as a significant barrier to success (Marchand et al., 2024). As such, the Natural Areas Program could collaborate in regional climate adaptation efforts.

Historical and Current Uses of the Preserve

Historical and Current Native American Tribal Use

From time immemorial the islands known as the San Juan Islands, north of the Olympic Peninsula in the Salish Sea, have been the territory of the North Straits Salish language speaking people (*Native Languages of the Americas*, 2020). Washington's first people have unique and rich insight into the natural environment of Washington State (Casey Palmer-McGee, 2017). Straits Salish peoples maintained seasonal camps on the islands including familial ownership of reef netting sites (Suttles, 1974, p. 36) and traveled around the islands seasonally for fishing, hunting, and gathering (Suttles, 1974, p. 41). Villages could contain as many as 5 to 20 long houses that could house up to 200 people (Stern, 1934, p. 7). Point Doughty is currently located at the approximate location of a historical Lummi village site called T'qwá:leqs (Casey Palmer-McGee, 2017).

Important cultural marine assets including anadromous fish, marine mammals, and shellfish, which were fished from shore or canoes, netted, cultivated, or harvested in fish weirs. Some vegetal foods were ground into rough flour. Many game resources were used to produce other goods including bone, horn, and antler tools and gaming pieces, goat fur and Salish dog fur were woven into blankets, and skins and furs were also valuable materials. Like indigenous groups throughout the northwest, regional groups participated in potlatches, especially in early fall when dog salmon were running.

In addition to foodstuffs and the use of animals for tools, other significantly utilized materials included stone, shell, and non-food vegetal materials. Dentalia shells were used regionally as currency. Other marine shells were used for utilitarian purposes; mussels and clams, for instance were used for scrapers, blades, projectile points, or ladles (Stewart 1996:125-130). Other shells were used for ornamentation. Marine shell was collected or traded.

Point Doughty NAP is located within the area ceded by the Treaty of Point Elliot. The Point Elliot Treaty, as well as other Treaty agreements between the State of Washington and Tribes, protected Tribal rights to fishing, at "usual and accustomed grounds and stations..."

as well as “the privilege of hunting and gathering roots and berries on open and unclaimed lands” (Treaty of Point Elliot, 1855). Many of these usual and accustomed areas overlap with DNR-managed land, including the Point Doughty NAP.

The land and adjacent waters around the NAP are still used by the North Straits Salish peoples. Tribal people have strong ties to the land and water that inform the management and harvest techniques of the natural resources under their stewardship. The many plant and animal species in their traditional territory provided everything needed to thrive, from clothing and shelter to common and ceremonial tools. The Tribes maintain an interest in, and practice stewardship of the land within their traditional territories, which include Point Doughty NAP.

DNR recognizes sovereign tribal rights and authorities and maintains government-to-government relations with all twenty-nine federally recognized Indian Tribes residing in the state of Washington, as well as other tribes with rights in the state. In recognition of the rights protected in the Treaty of Point Elliot, and in appreciation of the long, rich history Tribes bring to bear on natural resources management, DNR also recognizes the vital knowledge tribal peoples have of our shared natural resources and operates under an order from the Commissioner of Public Lands to ensure management of state-owned lands is accomplished in collaboration with the twenty-nine federally recognized Tribes of Washington State. DNR will facilitate Tribal access to the NAP for usual and accustomed practices and will collaborate with Tribes on management decisions that affect Cultural Resources and/ or conservation values.

European-American Settlement

Prior to contact with the United States Government, the Lummi Nation traded for half a century with Russians, Spaniards, Japanese and the English (Newlon et. al, 2024). With the establishment of the Hudson Bay fur trading company on Vancouver Island in 1843, Europeans began settling on Orcas Island. Point Doughty is named for John Doughty, captain of the 1841 Wilkes Expedition (Edmond S. Meany, 1923). The Exploring Expedition of 1838-1842, led by Captain Wilkes, provided reconnaissance of Oregon Country. This undertaking is considered by some historians to have contributed to Congressional appropriation of this region (Portland State University and the Oregon Historical Society, 2024). Washington state became part of US territory as part of the Treaty of Oregon in 1846 (Portland State University and the Oregon Historical Society, 2024), which established the boundary between the United Kingdom (British North America) and the United States. Orcas Island was included in the territory disputed in the Pig War (Carter, 2012).

The fur trade supported the early colonial economy of the islands. As populations of fur bearing animals declined, the fur trapping trade in the San Juan Islands followed. The economy of the island shifted to agriculture and surface mining and processing of limestone to produce quicklime. The Allotment Act in 1887 encouraged an influx of American settlers to Orcas Island, intent on homesteading. These settlers brought sheep that roamed and

grazed freely, greatly changing the ecology of Orcas Island. Old growth forests were felled for agricultural production and the operation of lime kilns. Lime kilns required a large amount of timber to fuel the kilns used to dry limestone, a step in the production of quicklime. As more settlers established orchards and agricultural lands, more old growth forests on Orcas Island were cleared and burned. Apple and Italian Plum orchards began to dominate the landscape. At the end of the last century, the growth of the tree fruit industry led to further forest clearing.

Recent History and Use

The Washington Natural Area Preserves Act (RCW 79.70) designates preserves for conservation of lands, resources and ecosystem functions, use as outdoor classrooms, as sites for scientific research and, as appropriate to each site, for other low-impact teaching and recreational uses so long as the conservation features of the site are maintained.

Tourism replaced fruit production as the main form of commerce on the island, as the profitability of agricultural land declined with competition from irrigated orchards in eastern Washington and California. As the tourism industry expanded, so did construction of resorts and other accommodations on the island. Public lands and state parks were established at the turn of the century during the economic downturn of homesteads. A large land donation from Robert Moran established Moran State Park, the first publicly owned lands on Orcas Island, in 1921 (Carter, 2012).

The Point Doughty NAP was designated in 1988. The NAP protects some of the few remaining examples of high-quality Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Ocean-spray Forest on Orcas Island. The area around the NAP remains rural in nature, dominated by low density residential development and small-scale agriculture.

The Role of fire in the Development and Maintenance of this Ecosystem

Historically, this site likely experienced at least moderate frequency fires (every approximately 30-100 years) and based on recent studies, may have had much more frequent fires (every 5-30 years). Dry Forest types in the Puget Trough have mostly been associated with a moderate-severity/intermediate frequency regime, including by Chappell (2006). More recently, the US Forest Service LANDFIRE Rapid Assessment Vegetation models suggested that the west Cascades dry Douglas-fir and Pacific Madrone ecosystems historically experienced low intensity fires every 7-12 years on average, with stand-replacing fires occurring only about every 275 years (Bakker et al., 2019; US Forest Service, 2012). Recent fire history studies at several locations in the San Juan Islands with the same or similar forest types also support a relatively frequent, low-intensity fire regime, with intervals ranging from approximately 5 to 30 years (Bakker et al., 2019). It is likely that fire frequencies varied considerably in these dry, coastal environments, as fires would have resulted from a combination of infrequent, sporadic lightning and more regular but localized ignitions by indigenous people.

Cyclical disturbance in these fire-dependent ecosystems maintains the structure and diversity that supports complex plant and animal communities. Fire regulates the density and composition of overstory trees; it also helps maintain species diversity in the understory by reducing cover of competing vegetation and allowing sunlight and open space on the forest floor for a diversity of seeds to germinate and establish. In addition, higher frequency of the occurrence of fire limits the buildup of fuels that drive high intensity fires.

Current Uses

Point Doughty currently includes access in the form of research, guided environmental education opportunities, and recreation in the form of a short trail along the shoreline and a small three-site camping area near the northwest corner of the property. Site management prioritizes conservation over recreation. Please see the State Trust Lands Map, or the DNR GO! Map, found on the DNR Website, for a list of other DNR-managed sites for additional recreation opportunities. See also the public access policy for Natural Area Preserves in Appendix 7.

Science, Research, and Monitoring

Public and private universities, other research institutions and individual researchers may contact DNR to propose a research project at Point Doughty NAP. If you are interested in pursuing research at Point Doughty, please contact the natural areas ecologist (Appendix 12). Research proposals must follow Natural Areas Program research guidelines, which are available from the DNR Northeast Region office or the statewide natural areas program ecologist. Official letters of project approval or denial including any specific conditions will be issued by the Natural Areas Program within approximately two weeks of receipt of a proposal. Multi-year projects will be re-evaluated and notified of approval or denial to continue on a yearly basis.

The NAP has been the subject of several research projects over the years. Recent examples include studies of the diversity and evolution of the Cretaceous flora of the San Juan Islands and survey of the plant fossil resources at the NAP. See Appendix 8 for more information about the research and monitoring that has occurred on the site.

Environmental Education

Non-profit education groups, commercial outfitters, and non-profit youth camps have used the NAP for informal environmental education activities. Currently, no formal educational programs are available at the NAP. The Northwest Region natural areas manager may consult with DNR's Youth Education and Outreach Program (YEOP) to identify suitable opportunities to provide environmental education in partnership with local education entities (schools, skills centers, non-profit partners, extra-curricular programs, etc.). Additionally, YEOP staff may coordinate with the natural areas manager to coordinate access to Point Doughty NAP for environmental education programming through activities such as field trips, site stewardship, data collection, and monitoring projects in collaboration with local education partners. YEOP staff specialize in working with formal and non-formal educators to develop curriculum appropriate to the students and the site and provide consultation and training for DNR staff outside the YEOP program to lead these kinds of events themselves. For more information about educational visits to the NAP, contact the DNR Northwest

Region natural areas manager (Appendix 12). For more information about environmental education opportunities on DNR Lands, contact the DNR YEOP program manager (Appendix 12).

Volunteer and Stewardship Opportunities

Volunteers can help with a variety of activities on natural areas, including invasive species control, restoration, and monitoring. Volunteer and stewardship opportunities like these are often well suited for youth groups, engaged through DNR's Youth Education and Outreach Program. If you are interested in volunteer and stewardship opportunities in the NAP, please contact the DNR Northwest Region natural areas manager at (Appendix 12). For more information about volunteer or stewardship opportunities on DNR Lands, contact the DNR YEOP program manager (Appendix 12).

DRAFT

Management Policies, Goals and Actions

General Management Guidance

The Washington Natural Heritage Program identifies Natural Area Preserves, as defined in RCW 79.70, through a scientific inventory process. The purposes of NAPs are:

- To protect outstanding examples of rare or vanishing terrestrial or aquatic ecosystems, rare plant and animal species and unique geologic features
- To serve as baselines against which the influences of human activities in similar, but differently managed ecosystems can be compared; and
- To provide areas that are important to preserve natural features of scientific or educational value

Limited Intervention in Natural Processes: The forests of the NAP are susceptible to a variety of insects and other pathogenic organisms, natural events such as lightning-caused fire, damage from wind, earthquake, etc. Damage from native insects and other pathogenic organisms, and from natural events is part of the preserve's natural ecological conditions and processes. Allowing natural processes, absent intervention, will be the preferred management approach, unless they pose a threat to human life or adjacent landowner property and/or require treatment by law. Non-native introduced insects or other pathogens that threaten key natural features of the preserve will be controlled to the extent possible. Human-caused fire will be controlled as outlined in the Appendix 1 below.

Public Access Policy: Access and allowable uses in natural areas are defined by the Natural Areas Public Access Policy (Policy 013-002, DNR), consistent with Washington Administrative Code (WAC) 332-52 for Public Access and Recreation on DNR-managed lands and consistent with Revised Code of Washington (RCW) 79.70 for the establishment of Natural Area Preserves.

Uses within NAPs are limited to low impact non-consumptive activities, focused on scientific study or environmental educational purposes (including use of designated trails and facilities which are developed to encourage learning about the NAP features), or traditional established aboriginal rights. As part of the ongoing site management, the natural areas manager will work with the natural areas ecologist when considering opportunities to provide low impact access as funding and staffing allow. Point Doughty was acquired by the Natural Areas Program with existing infrastructure that included three primitive campsites and a short trail along the shoreline in the northwestern portion of the NAP. These features have been retained and are regularly maintained.

Access for research or education projects must be consistent with the site management goals and requires written authorization. Individuals granted permission to access the site beyond interpretive trails and camp sites are required to have one copy of the written authorization with them while on site conducting those activities. Contact the DNR Northwest Region

natural areas manager to request consideration of a research or education project at Point Doughty NAP.

Activities and use within the NAP should not compromise a site's integrity, ecological, geological, scenic, historic or archaeological values. Activities should be constrained in a manner to leave vegetation, animal behavior, soil and water relatively unaffected. The NAP will be monitored, and the allowable uses at the site revised if the protected values of the site are negatively impacted by use in a way that affects the site's integrity as measured by direct observation of site conditions or an Ecological Integrity Assessment (See Management Goal 1, and Appendix 9). The Natural Areas Program *NAP Public Access Policy* is found in Appendix 7 (or available via the internet at the Point Doughty NAP webpage). For a map of low impact recreation opportunities on DNR-managed land in the area, use DNR's statewide interactive recreation map or the DNR GO! Map online to find other sites to recreate on state lands.

Goal 1: Protect Primary Features

As a Natural Area Preserve, the purpose of land management at Point Doughty NAP is to protect the primary features of conservation significance from human-induced stressors ([Table 1](#); [Figure 1c](#)). Any activity or management action taken at the site should first consider whether it would risk the viability or ecological integrity of these primary features.

Objective: Address Research Needs in Support of Primary Features

Research provides key insights into the ecological drivers of site conditions and relationships between species and their environment. There are often specific needs for data collection and research to inform adaptive management of the site. These needs are site-specific and may evolve over time as we identify shifts and impacts driven by climate change or other cumulative stressors. Research should be conducted in collaboration with the natural areas manager and staff and under permit approved by the natural areas program ecologist to successfully support and protect the priority features at the NAP. DNR's Natural Heritage Program scientists should also be engaged when research is focused on the primary features identified in the Washington State Natural Heritage Plan. See Appendix 8 for the current and upcoming research needs for the NAP.

Objective: Follow Management Guidance for Primary Features

The guiding principle for managing the NAP is to permit natural ecological and physical processes to predominate, while controlling activities and un-natural events and processes that directly or indirectly modify them. Exceptions may occur when a primary feature would be jeopardized without active intervention.

Management activities will maintain the site in the best natural condition possible. Removal or alteration of vegetation, soil, or rock is not allowed except where specifically authorized by DNR under the framework of this plan. When we conduct restoration, sites are restored to their historic state and or reference condition of the ecosystem type when appropriate. Goals for preserve management include:

- Protect the site's primary natural features, including ecosystem processes

- Monitor threats to the natural features and the health of natural systems
- Facilitate environmental education and research on the preserve
- Manage non-native and invasive plant or animal species
- Protect cultural and archeological sites
- Providing access when it is compatible with the preserve's conservation goals, including Tribal access for cultural and spiritual practices

The overarching management goal is to maintain the ecological integrity of natural areas such that they do not deteriorate below the ecological condition at the time of establishment, or that they reflect a restored Ecological Integrity Assessment (EIA) rank of at least B or better in cases where their initial ranking is below a B. An EIA should be conducted on a 5-year rotation to provide relevant data for decision making and respond in a timely manner to changes in ecological integrity of the site. Additionally, EIAs should be conducted after any event that could drive change in an ecosystem. Examples of such events are extreme weather events, natural disturbances (fire, flood, invasive species establishment, or others), development of adjacent parcels, significant restoration work, or impacts to the preserve's features from upstream or off-site events. Monitoring for specific components or processes of ecosystem features (such as water levels, water quality, tree growth rates), or for other features may be necessary and will be added to Appendix 10 as needed. Key background and goals for the management of primary features is established in this plan, with additional detail provided in Appendix 10.

Various information sources describing reference conditions (i.e. the natural range of variability of composition, structure, and ecological processes) for the ecosystems has been consulted and should continue to be used to help guide management (see details in Appendix 10).

Douglas-fir / Salal- Oceanspray Forest & Pacific Madrone - (Douglas-fir) / Salal Forest

These two element occurrences co-occur at Point Doughty in a mosaic, with approximately 15 acres of Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest (primarily along the southern bluff edge) and about 42 acres of Douglas-fir / Salal - Oceanspray Forest (Figure 1c). The site protects some of the best quality remaining occurrences of the dry-site forest communities including Douglas-fir / Salal – Oceanspray forest in the interior of the site, and Pacific Madrone – (Douglas-fir) / Salal Forest along the shoreline cliffs and near the point (Figure 3). These plant associations are considered globally vulnerable and imperiled, respectively, because of the small number of occurrences, small global range, and high degree of threats. The occurrence of Pacific Madrone – (Douglas-fir) / Salal Forest found at Point Doughty is among the few remaining which have not been impacted by logging or development in western Washington. The Douglas-fir / Salal - Oceanspray Forest is dominated by mature Douglas fir and includes patches of more opened canopy with remnant old growth trees scattered throughout the site.

An EIA was conducted in 2024 for both forest types and both element occurrences received condition ranks of A (Excellent). Invasive species, primarily Himalayan blackberry (*Rubus bifrons*) and thistle occur predominantly near the camping area and along the trail. Impacts from authorized recreation and unauthorized use, as well as invasive species present a threat

to both plant associations. Climate change and Douglas-fir encroachment pose an additional threat to the Pacific Madrone - (Douglas-fir) / Salal Forest type. Douglas-fir encroachment may be occurring in part due to exclusion of fire from the landscape. The 2024 EIA report described a dense shrub layer and a vegetation composition shifting to be dominated by Douglas-fir rather than Pacific Madrone, which may be indicative of suppressed disturbance regime. Studies of the San Juan islands suggest that in at least some areas, the suppression of natural and historical anthropogenic fire regimes has resulted in a lack of regeneration in disturbance-dependent species as well as high relative cover of shrub species (Bakker et al., 2019). However, while fire has been excluded from Point Doughty for decades, both element occurrences have characteristics well within their natural range of variability. It is possible that the proportion of Douglas-fir / Salal - Oceanspray Forest is larger now than it may have been historically, perhaps encroaching on the madrone-dominant stands in the absence of fire. There are also small inclusions of Douglas-fir / Baldhip Rose - Oceanspray / Western Fescue Forest present within the Douglas-fir / Salal - Oceanspray EO, particularly along the northern bluff edge. That association may have been more prevalent under a more frequent historical fire regime. Further research is needed to determine if and to what degree the proportions of different associations may have changed. Climate change, which accelerates rates of coastal erosion contributes to loss of ground and trees directly to the ocean from increased strong wave action during storms.

Various information sources describing reference conditions (i.e. the natural range of variability of composition, structure, and ecological processes) for the ecosystems have been consulted and should continue to be used to help guide management (see Appendix 10). Chappell (2006) provides Washington specific descriptions.

Management Goal:

- Maintain these communities in Ecological Integrity condition rank of A, with a focus on maintaining or improving structural diversity and reducing invasive species in the understory.

Bald Eagle - Primary Feature

Two Bald Eagle nests existed on the site when it was established as a Natural Area Preserve. This site provides habitat to support nesting, perching, and foraging of Bald Eagles. The Bald Eagle has since been delisted due to habitat conservation efforts, including the establishment and management of DNR-managed natural areas. No recent surveys have been done to determine whether there are any active nests. However, the habitat remains in good condition to support ongoing perching and foraging, and future nesting.

Management Goal:

- Ensure the persistence of Habitat Structure for Primary Wildlife Features by maintaining the Ecological Integrity of the site in a condition rank of B or better. Protection of the primary ecosystem features of the site will achieve the maintenance of the habitat that supports Bald Eagles when present.

Goal 2: Provide and Manage Access

Current use of the NAP includes scientific research and environmental education, two points of access from the beach to a short shoreline interpretive trail and three-site camping area in the northwestern portion of the NAP. The Natural Areas Program, under the DNR *NAP Public Access Policy* in Appendix 7 (available online at <https://www.dnr.wa.gov/PointDoughty>), prioritizes the educational value of Natural Area Preserves through conservation management to preserve natural features, and to support scientific research and environmental education. Where appropriate in terms of location, intensity, timing and type of access, certain non-consumptive and low-impact recreational uses can be accommodated, so long as they are consistent with primary feature protection objectives outlined above.

Activities in the NAP should not compromise a site's integrity, ecological, geological, scenic, historic or archaeological values. Activities should be constrained in a manner to leave vegetation, animal behavior, soil and water relatively unaffected. The NAP will be monitored in accordance with WAC 332-52-100, the allowable uses at the site revised, if the protected values of the site are negatively impacted by these activities in a way that affects the site's integrity as measured by direct observation of site condition or an Ecological Integrity Assessment (See Management Goal 1, and Appendix 10).

Objective: Offer Access for Education and Teaching

DNR staff will continue to offer guided educational access, as capacity and funding allows, throughout the site where it can be safely provided. The DNR region natural areas manager may coordinate with DNR's Youth Education and Outreach Program to facilitate access and engagement opportunities to local youth. Key opportunities for classroom and community educational projects and activities include:

- Guided school outings
- Native plant and bird group events
- Non-profit educational group events
- Youth summer camp events
- Volunteer events

For more information about educational visits to Point Doughty NAP, contact the DNR Northwest Region natural areas manager (Appendix 12). For more information about environmental education opportunities on DNR Lands, contact the DNR YEOP program manager (Appendix 12).

Objective: Access for Research and Monitoring

Natural Areas Program staff conducting research or monitoring within natural areas may draw upon the resources available within DNR's Youth Education and Outreach Program and similar community-based educational or scientific organizations. Advanced educational research or student internships may be available for hands-on learning opportunities in the fields of conservation land management and ecological restoration. For information about ongoing research or interest in conducting research at Point Doughty NAP, contact the natural areas ecologist (Appendix 12). For information about student internships and other hands-on learning opportunities on DNR-owned lands, contact the YEOP program manager (See Appendix 12).

Objective: Recreational Access

Recreational access is limited to designated areas. There are three established campsites with fire rings and a urine diversion vault toilet located in the northwestern portion of the NAP. Additionally, an interpretive trail runs parallel to the high-bank bluff along the western shoreline of the NAP. Primitive, low-impact recreation activities will continue to be allowed at the NAP so long as they can be managed consistently with primary feature protection objectives outlined above. These activities include back country camping in designated sites, beach access, wildlife viewing, fishing from the shoreline, and interpretive trail access. Commercial recreation outfitters are known to use the site for limited duration day trips and overnight stays. All recreational uses, current and future, will be evaluated by DNR, as needed, and allowed pursuant to primary feature protection objectives and DNR policy.

Objective: Collaborate to Ensure that Tribal Practices are Consistent with Conservation Goals

Together with interested Tribal partners, DNR will assess whether and how specific traditional practices can be accommodated at the site while staying consistent with the site's conservation goals.

Objective: Clearly Outline Limitations on Uses

Prohibited uses and activities within the NAP determined by DNR to be inconsistent with the conservation purpose of the Natural Area Preserves Act as outlined in RCW 79.70 are considered incompatible with conservation management and are not approved uses. DNR's existing law enforcement policies will apply. The Department will comply with applicable regulations in the management of the NAP and will cooperate with local and state enforcement agencies when necessary to curb unauthorized use. Prohibited uses at the NAP include, but are not limited to the following:

Vehicles – Use of vehicles, including motorized and non-motorized vehicles, in the NAP is prohibited. Exceptions are limited to use for emergency response, management activities and stewardship activities.

Drones - Use of drones creates disturbance that can affect animal behavior. Drones also create the potential for disturbance to authorized activities at the site. As such, they are incompatible with conservation objectives, and the quietude users come to the NAP to experience. Drone liftoff and landing are not approved uses within the preserve.

Radio controlled toys – Radio controlled toys have the potential to harm sensitive plants and animals, create or exacerbate erosion, and create the potential for disturbance to authorized activities at the site. As such, they are incompatible with conservation objectives for the NAP.

Livestock - Horses and other livestock have the potential for significant impacts in the form of trampling native vegetation, soil compaction, and introduction of non-native and/or invasive species. As such, livestock use at the site is incompatible with conservation objectives for the NAP.

Pets – Due to the sensitive nature of the plants and soils, and the potential for negative impacts and disturbances upon wildlife species, pets are not permitted within the preserve boundary, except for service animals (WAC 332-52-140(1), which must be leashed at all times.

Social Trails – In accordance with WAC 332-52-405 (1), the creation of unauthorized trails within the natural area is not an appropriate use. Unauthorized trails may not be known to site managers and are not patrolled, maintained, or monitored. A lack of monitoring and maintenance results in significant negative impacts to the vegetation on and adjacent to the trail as it becomes worn down and widened, including damage to or loss of sensitive plants. Social trails generate bare ground for invasive plants to colonize, create the potential for erosion, and can lead to habitat fragmentation which can inhibit wildlife movement across the landscape.

Hunting and Trapping – Hunting and trapping are not approved uses for Washington’s Natural Area Preserves. DNR does not allow hunting or trapping on NAPs unless it is necessary for management purposes. As mentioned above, the guiding principle for managing the NAP is to permit natural ecological and physical processes to predominate. The ecological relationships between predator and prey, or grazers and vegetation are dynamic and naturally fluctuate to a degree. While humans are a part of this dynamic in natural systems, the pressure applied by opening this small natural area to hunting would exceed limits of acceptable change and put at risk those features the site was designated to protect. Additionally, hunting can negatively impact ecological research by violating assumptions about the influence of natural process on study results, introducing variation to the analyses, and damaging or eliminating monitored populations or plots from the sample.

Exceptions to the exclusion of hunting and/or trapping may occur when a primary feature would be jeopardized without active intervention. Should the need to use hunting as a management tool arise, the DNR natural areas manager will consult with Washington Department of Fish and Wildlife to define the parameters under which animal control methods would be allowed.

Removal (Harvest and Removal) of Plant or Mineral Material – In accordance with WAC 332-52-115(1a,b), the harvest and removal of any amount of plant or mineral material is not an allowable use, other than by DNR land managers for conservation purposes or with written permission from the natural areas manager or the natural areas program ecologists.

Removal or Damage to Historical and Archaeological Objects, Features and Sites
Archaeological and cultural resources are protected by state law concerning Archaeological Sites and Resources (RCW 27.53), the National Historic Preservation Act (P.L. 89-665 as amended) and the Archaeological and Historic Preservation Act of 1974 (P.L. 93291). The removal or alteration of archaeological materials including artifacts, features, sites, and structures from DNR-managed lands is not allowed, other than when carried out by authorized individuals to protect the resource from loss or harm and/or conduct scientific analysis.

Fishing – Fishing from the shoreline along the western boundary of the NAP is allowed, subject to Washington Department of Fish and Wildlife rules. Fishing from the high bluff or cliff portions of the NAP is not allowed as it creates a safety hazard associated with the potential for falling and creates the potential for bluff erosion. There are only two allowable access points to the NAP: a set of stairs from the shoreline to the upland portion of the NAP near the camping area, and another set of stairs at the south end of the interpretive trail. All other social trails are closed to protect against impacts to vegetation and soil erosion associated with scrambling up and down high bluffs.

Other Uses Not Outlined Above – Any uses and activities within the NAP not prohibited above that are determined by DNR to be inconsistent with the conservation purpose of the Natural Area Preserves Act as outlined in RCW 79.70 are considered incompatible with conservation management and are not approved uses. DNR's existing law enforcement policies will apply. DNR will comply with applicable regulations in the management of the NAP and will cooperate with local and state enforcement agencies when necessary to curb unauthorized use.

Goal 3: Manage the Site in Response to a Changing Climate

Natural areas play a significant role in ecological climate resilience. Natural areas are considered a key component in mitigating climate impacts and play a strategic role in protecting the biodiversity and natural heritage of Washington State. They provide environmental services, such as sequestration and storage of carbon, provision of habitat refugia for rare species, maintenance or improvement of water quality and watershed processes, and protection of rare plant communities and ecosystems.

Objective: Review and Adapt Management Practices as Needed to Address Impacts of Climate Change

In recognition of the importance of consideration of climate change in conservation planning, land management approaches may need to adjust to continue to preserve protected elements in natural areas. Natural Areas Program land managers and ecologists regularly review and consider existing approaches to the following as a part of general site management at Point Doughty NAP:

- Collaborate with interested Tribal specialists and Washington Natural Heritage Program staff to inventory significant plants in the NAP and determine their vulnerability and response to climate change
- Review the adequacy of the NAP boundary to protect primary features against climate change
- Consult available climate change vulnerability assessments applicable to the primary features of the site to identify primary concerns and potential management actions. The Natural Heritage Program Climate Change Vulnerability Index assessments for rare plants and Habitat Climate Change Vulnerability Index assessments for ecosystems (<https://www.dnr.wa.gov/NHPclimate>) are primary resources
- Review invasive species management practices (see Natural Heritage Program invasive species ecological impact reports)
- Review the benefit of prescribed and/or cultural fire on the landscape, and alternatives to fire as a tool to achieve similar ends

- Review the balance between inherent ecological and scientific value and human use and update policies as needed
- Review restoration targets informed by shifting climatic conditions (see above, climate change vulnerability assessments)
- In consultation with Natural Areas Program and Natural Heritage Program scientists, review the use of certain species in restoration projects in light of ongoing climate changes to plants and insect pests (i.e. reduction in use of species that are not doing well with climate change for restoration purposes)
- In consultation with Natural Areas Program and Natural Heritage Program scientists as well as the Natural Heritage Advisory Council, review the potential need for assisted migration of near-by native plant and animal species.

Goal 4: Minimize the Impacts of Wildfire Management

Wildfire suppression in Point Doughty NAP focuses on protecting life, resources, and property, and will be conducted to the degree possible with “Minimum Impact Suppression Tactics (MIST)” to minimize impacts to conservation features. Where possible, natural fires (e.g. lightning-caused) may be allowed to burn naturally, without suppression efforts, and managed with a monitor and contain strategy with the objective of containing the fire within the NAP, so long as that approach does not conflict with protection of life and property (See Appendix 1 for the Wildfire Management Strategy for the NAP).

Objective: Follow the Wildfire Management Strategy Emphasizing Minimum Impact Suppression Strategies and Tactics

Sensitive areas identified on maps should be excluded from firefighting activity whenever possible, particularly for use of retardants, water, heavy equipment or other ground - disturbing control / containment methods. After fires have been suppressed, site restoration will be supervised by the region natural areas manager in consultation with the natural areas program ecologist.

Goal 5: Control Invasive Species

For the purposes of this management plan, an invasive species is a plant species that poses a threat to site management goals. Invasive species can repress or exclude native species and are widely viewed as one of the greatest threats to ecosystem health and biodiversity worldwide. Inventory, assessment and control of invasive weed species are top priorities in NAP management. The priority species of concern are those that are considered able to invade the NAP and have the greatest potential to alter the native ecosystem. Other species of concern are typically found on disturbed soils and do not appear to be expanding into the undisturbed areas. Useful sources of information on invasive species ecology, control, and ecological impacts include state and county weed control board information, Invasive Species Profiles (<https://www.invasivespeciesinfo.gov/species-profiles-list>), Center for Invasive Species and Ecosystem Health (<https://www.invasive.org/>), and the *Washington Invasive Ranking System*. This information can be used to identify species that may be potential threats to the site as well as to help prioritize species for control. Creation of a formal weed management plan is a high priority on the near-term project list in Appendix 3.

While a thorough survey for invasive species has not been completed, upland weed species of concern known on the preserve include:

- Tall oatgrass (*Arrhenatherum elatius*)
- Ripgut brome (*Bromus diandrus*)
- Cheatgrass (*Bromus tectorum*)
- English hawthorn (*Crataegus monogyna*)
- Scot's broom (*Cytisus scoparius*)
- English holly (*Ilex aquifolium*)
- Himalayan blackberry (*Rubus bifrons*)
- English mountain-ash (*Scoparia aucuparia*)
- Rattail fescue, Brome fescue (*Vulpia myuros*, *V. bromoides*)

Objective: Follow the Site Weed Management Plan and Coordinate with Partners to Reduce Overall Cover of Invasive Weeds.

Weed management techniques for priority species of concern will vary seasonally for the best effect based on the physiology of the target species and avoidance of unintended impacts to non-target species. Some combination of mechanical and chemical approaches will be the primary tools. Species-specific approaches can be found in Appendix 11.

Other species of concern should be addressed through documentation and treatment of nascent populations and the containment and control of established populations. In addition to ongoing vegetation surveys, monitoring for invasive species should focus on boundaries, areas of recreational use, forested edges, areas where social trails are discovered, as well as areas affected by future management activities, especially those that will create light gaps in the overstory and soil disturbance in the understory.

Goal 6: Aquatic Lands Management

DNR is responsible for managing approximately 2.6 million acres of state-owned aquatic lands. These aquatic lands include tidelands, shorelands of navigable rivers and lakes, beds of marine and fresh waters, lands in harbor areas and waterways, and even some filled aquatic lands which now resemble uplands.

The NAP does not include any state-owned aquatic lands. The DNR Aquatic Resources Division manages the state-owned tidelands and bedlands adjacent to the NAP.

Objective: Coordinate Aquatic Land Management Activities with the DNR Aquatic Resources Division.

Natural areas managers will direct inquiries related to state-owned aquatic lands adjacent to the NAP to the DNR Aquatic Resources Division. The Natural Areas and Aquatic Resources Division will coordinate management activities that include a nexus between state-owned aquatic lands and the NAP.

Goal 7: Ensure the Persistence of Habitat Structure for Wildlife

The habitat within the NAP supports a rich diversity of wildlife, including the Bald Eagle and Peregrine Falcons. Per the adopted *NAP Public Access Policy* in [Appendix 7](#), the removal of wildlife only occurs as a DNR-approved management action, if necessary. No access is allowed for hunting.

Objective: Ensure the Goals for Protecting Primary Features are Met.

The wildlife protected in Point Doughty NAP are native to these natural ecosystems. Species presence may vary with diurnal, seasonal, or annual cycles. Whether or not a species is documented on site at a discrete point in time, the ability for the habitat to support that species when it is present is the goal. Protecting the primary ecosystem features of the site maintains the habitat that supports a diversity of wildlife including those identified by the Washington State Natural Heritage Plan as conservation priorities.

Goal 8: Protect Archaeological and Cultural Sites

The lands and waters in and surrounding the preserve are known to have been inhabited or used by past peoples and may include important cultural resources. In compliance with Governor's Executive Order 21-02 (GEO 21-02) and in cases where natural area projects have a Federal nexus under Section 106 of the National Historic Preservation Act (NHPA), State Department of Archaeology and Historic Preservation records shall be reviewed prior to the implementation of any research, education or management activity. Confidential cultural data is protected and exempt from disclosure under RCW 42.56.300 to prevent looting and depredation of the artifacts. Contact the DNR Northwest Region natural areas manager for more information.

Process for Historical and Archaeological Preservation

Natural areas managers will initiate informal Tribal consultation with affiliated Tribes and work with professional archaeologists to ensure cultural resource compliance with GEO 21-02. GEO-21-02 mandates that:

- DNR shall consult with DAHP and affected Tribes on the potential effects of projects on cultural resources proposed in state-funded construction or acquisition projects. Consultation should occur early in the project planning process and must be completed prior to the expiration of state funds for construction, demolition or acquisition.
- DNR shall take all reasonable action to avoid or mitigate adverse effects to archeological sites, historic buildings or structures, traditional cultural places, sacred sites, or other cultural resources
- DNR shall retain the responsibility to ensure an adequate consultation process and will be responsible for holding all records related to the Tribal consultation process. DNR will provide the records to DAHP to demonstrate completion of the Tribal consultation process.

- A cultural resources study may be needed before a project may proceed and DNR must consult with DAHP and the affected Tribes for the purpose of seeking agreement on studies.
- If an archaeological site, historic building or structure, or cultural or sacred place is identified during a study, DNR shall consult with DAHP and the affected Tribes on avoidance strategies or methods to minimize harm if the project poses a direct or indirect effect on cultural resources.
- In the case of historic buildings/structures, DNR shall develop mitigation strategies in consultation with DAHP and if requested, affected Tribes. For all other cultural resources including archaeological and historic archaeological sites or traditional and sacred places DNR may only develop mitigation strategies upon notifying DAHP and the affected Tribes that avoidance cannot be attained.
- Mitigation strategies for archaeological, cultural and sacred sites shall be identified through consultation with DAHP and the affected Tribes.

In instances where DNR works in conjunction with a Federal Agency or under a federal nexus, natural area managers and professional archaeologists will work with the appropriate federal agency on Section 106 requirements and compliance. Confidential cultural data is protected and exempt from disclosure under RCW 42.56.300 to prevent looting and depredation of the artifacts. Contact the DNR Northwest Region natural areas manager for more information.

Management Goals, Actions and Activity Details

Table 2. Management Guidance for Point Doughty NAP

| Goal | Management Action | Activity Detail |
|--------------------------|---|--|
| Protect Primary Features | <ul style="list-style-type: none"> • Implement a strategy to protect the site’s primary features based on reference conditions defined by EIA metrics, the global and state element descriptions, and other relevant information | <ul style="list-style-type: none"> • Manage for highly invasive species • Direct access to approved trail and camp sites • Restore use-impacted areas. • Regularly inspect boundaries for incursions into the preserve, and for invasive weeds • Pursue funding and facilitate partnerships to meet site management and needs • Encourage research on priority topics to assist with site management |

| Goal | Management Action | Activity Detail |
|---|--|---|
| | <ul style="list-style-type: none"> • Gather and maintain information necessary for site management | <p>Highest Priority Monitoring Needs</p> <ul style="list-style-type: none"> • Ecological monitoring of primary features including EIA and existing long-term plots approximately every 5 years • Invasive species distribution, abundance, and control efforts <p>Additional Monitoring Needs</p> <ul style="list-style-type: none"> • Fossil collection impacts • Monitor potential impacts to natural features from site uses • Recreational Impacts survey along areas where use is permitted • Monitor shoreline conditions |
| Provide and Manage Access | <ul style="list-style-type: none"> • Maintain existing use facilities to ensure safe, sustainable recreation opportunities • Maintain and/or provide informational and educational signs to inform and educate users • Foster environmental education / Promote educational use of the preserve | <ul style="list-style-type: none"> • Monitoring and maintain access facilities • Complete an interpretive sign plan • Coordinate with DNR Youth Education and Outreach Program to connect with interested education groups for interpretive site visits, service projects, research and monitoring |
| Manage the Site for Changing Climate | <ul style="list-style-type: none"> • Assess climate vulnerability of protected features • Develop a Climate Adaptation Plan | <ul style="list-style-type: none"> • Complete climate vulnerability assessment (see Natural Heritage Program’s assessments: https://www.dnr.wa.gov/NHPclimate) • Research climate impacts such as bluff erosion, plant phenology |
| Minimize the impacts of Wildfire Management | <ul style="list-style-type: none"> • Develop Wildfire Management Plan emphasizing Minimum Impact Suppression Tactics | <ul style="list-style-type: none"> • Coordinate with Incident Commander in event of wildfire threats to NAP • Implement post burn restoration strategies when necessary |

| Goal | Management Action | Activity Detail |
|--|---|--|
| | | <ul style="list-style-type: none"> • Maintain recreation facilities to lower potential for fire spread into NAP. • Conduct regular updates to the Northwest Region Fire Mobilization Guide |
| Control invasive species | <ul style="list-style-type: none"> • Create site-specific weed management plan • Restore areas where native vegetation has been damaged, focusing on shorelines and use areas | <ul style="list-style-type: none"> • Complete weed survey • Treat priority invasive species • Continue monitoring treated areas |
| Coordinate with DNR Aquatics to Manage Aquatic Lands | <ul style="list-style-type: none"> • Direct inquiries about aquatic lands to appropriate staff in the Aquatic Resources Division | <ul style="list-style-type: none"> • Coordinate management activities that have an uplands/aquatic lands nexus with the Aquatic Resources Division |
| Ensure Persistence of Habitat Structure for Wildlife | <ul style="list-style-type: none"> • Coordinate with DFW | <ul style="list-style-type: none"> • Conduct wildlife survey of the NAP |
| Protect Archaeological Sites and Cultural Resources | <ul style="list-style-type: none"> • Consult and coordinate with Tribes to ensure that cultural resources/sites are not disturbed and to exchange information about the preserve | <ul style="list-style-type: none"> • Establish primary contacts for outreach about DNR projects and management activities • Learn about Tribal interests and concerns • Consult with Tribes on cultural resources reviews for projects • Follow mandated state and federal processes for Tribal consultation |

Routine Management Actions in Appendix 2

Routine management is the work required to steward the site exclusive of significant project-related work that requires special fiscal appropriation. The cost for such work is typically associated with staff time and goods and services required to conduct routine “maintenance and operations” work as outlined in Appendix 2 Table 2-1.

Costs associated with managing the NAP are expected to change over time due to general economic factors (such as inflation), identification of emerging land and resource management challenges, or to meet newly identified opportunities for research, environmental education or access. Most funding for maintenance and operations work comes from operating funding, which does not cover the cost of larger, more capital-intensive projects for which DNR seeks other funding.

Near-Term Project List in Appendix 3

Work on special projects typically requires special fiscal appropriation beyond that available for maintenance and operations. These one-time projects should be pursued to complete necessary planning and make investments for implementation of other-than-routine land management activities and/or capital projects. Appendix 3 includes a list of near-term projects and a rough estimate for the level of investment required to accomplish them, including the staff time required to complete the work.

Costs estimates are expected to change over time due to general economic factors (such as inflation) or to rise to challenges during implementation. The Department of Natural Resources pursues a variety of state and federal grant funding to assist with project implementation.

Duration of this Management Plan

This management plan, the routine management actions, and the near-term projects described herein, will be reviewed and updated as necessary by the DNR Natural Areas Program. Significant changes in management direction or policy guidance will include consultation with the Natural Heritage Advisory Council, and perhaps revision to the management plan and appendices, which is expected to happen infrequently. The list of near-term projects will be updated as needed based on completion of work and/or changes related to the cost factors noted above. Continuation of the management direction for Point Doughty NAP as stated in this adopted management plan may be incorporated into revised Appendices 2 and 3 without requiring additional review by the Natural Heritage Advisory Council.

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APPENDICES

The appendices for this document are in various stages of development and may include a placeholder for material that is in development. Note that Appendices 2 and 3 may be updated with each state budget cycle. When finalized, Appendices 4 – 14 will be available on the Point Doughty Natural Area Preserve website at: [www.dnr.wa.gov / PointDoughty](http://www.dnr.wa.gov/PointDoughty).

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APPENDIX 1 WILDFIRE MANAGEMENT STRATEGY for Point Doughty Natural Area (NAP)

Management Jurisdiction

Fire suppression on the NAP is the responsibility of the DNR's Fire Control Program. The Fire Control Program is responsible for fires on the non-federal, unimproved portions of San Juan County where the NAP is located. For questions contact the natural areas manager (Appendix 12).

Access

There is no overland road access to the NAP. DNR has no legal overland access to the NAP. There is road access to adjacent private properties along the south and east property lines of the NAP. Direct access to the NAP is by water, along rocky, boat-unfriendly shoreline.

Ignition Sources

Potential ignition sources include cigarettes thrown by site visitors, fireworks or other incendiary devices discharged from on site, offshore or from neighboring properties, blowing cinders from on-site fire rings at the existing camping area, or from campfires on beaches or neighboring properties, and lightning.

Preferred Suppression Tactics

Wildfire suppression in the NAP focuses on protecting life, resources, and property, and will be conducted to the degree possible with Minimum Impact Suppression Tactics (MIST) to minimize impacts to conservation features. Where possible, natural fires (e.g. lightning-caused) may be allowed to burn naturally, without suppression efforts, and managed with a monitor and contain strategy with the objective of containing the fire within the NAP, so long as that approach does not conflict with protection of life and property. Sensitive areas identified on maps should be avoided whenever possible, particularly for use of retardants or heavy equipment. These sensitive areas are primarily located along high-bank bluffs and cliffs that form the shoreline of the NAP, in and adjacent to the bald feature in the northwestern portion of the NAP, and in areas where the Douglas-fir / Pacific Madrone - (Douglas-fir) / Salal Forest and Douglas-fir / Salal - Oceanspray Forests are located. Taken together, these sensitive areas constitute virtually the entirety of the NAP.

The following are preferred fire suppression tactics:

- When safe and reasonable, use natural fuel breaks or control lines for fire suppression.
- There is no fresh water source on site. Salt water in large doses can be damaging to many upland plants. Use of salt water for suppression will be limited to the extent possible.
- Hand tools should be used to stop the spread of wildfire, except under extreme conditions or if an improved structure is threatened. If saltwater use is necessary, crews should use a mist (instead of straight stream) water application where possible.

- Water for use by Helicopter or other aircraft should be from fresh water sources only.
- Helicopter landing areas and/or fire camps shall not be established within the NAP.
- Heavy equipment (e.g. tractors, bulldozers, excavator, etc.) should be used only in the most extreme circumstances, when other methods of suppression are likely to fail, and then only to protect adjacent private property.
- Under extreme conditions or when an improved structure is threatened, foam or retardants are preferable to use of heavy equipment.
- Fire vehicles will be confined to roads on adjacent private property, where allowed, and when applicable, to bulldozed fire trails.
- Trees and snags will not be felled unless they pose a threat to firefighters or to improvements in the camping area.
- Location and extent of mop-up, and type of mop up activity will be determined by the Incident Commander in consultation with natural areas program staff. Mop-up activities should be minimized in the sensitive areas identified on maps and soil disturbance minimized by using water as much as possible.
- If a monitor and contain strategy is utilized, the natural areas program will provide staff (or arrange for other personnel) to monitor the fire. A monitoring plan, prepared by natural areas staff, will be submitted to NW region fire management staff within 24 hours of fire detection, and must be approved by fire staff in order to implement this strategy.

After fires have been suppressed, site restoration will be supervised by the region natural areas manager in consultation with the natural areas ecologist.

Site Representatives

If wildfire involves or threatens the NAP, one of the following DNR personnel shall be contacted and placed as a consultant to the fire Incident, using the closest available person first:

Natural Areas Manager, Northwest Region
(360) 708-1692

Natural Areas Program Ecologist, *Recreation, Conservation and Transactions*
Division
(360) 902-1600

Updated Natural Areas Program staff lists are available on DNR's website

In the event that coordination with the local fire district is required, staff can coordinate with:

Orcas Island Fire Department, (360)376-2331
For emergencies dial 911.

If the incident occurs after normal working hours, contact emergency services #911. Emergency services will contact the DNR Northwest Region standby staff, who will then contact a natural areas program representative from the above list at home.

The representative will inform the Incident Commander of:

1. The purpose of the NAP
2. The management objectives for the primary features of the NAP; and
3. The need to employ MIST fire suppression techniques when possible. The Incident Commander should contact the Region representative or the Division before beginning mop-up activities within the NAP.

Post- fire Rehabilitation: Following wildfires, the preserve should be allowed to regenerate naturally without human intervention. Post-fire revegetation will not be undertaken unless natural revegetation is impeded or slowed to such an extent that ecological features or processes in the area will be negatively affected. Areas with significant soil disturbance due to fire suppression efforts, *e.g.* berms and fire lines, may be restored by returning soil to its original location. Soil rehabilitation and revegetation efforts will only be undertaken after consultation with the natural areas ecologist. Revegetation (planting or reseeding with native vegetation) will only occur if natural recolonization is impeded by factors such as lack of seed source and proliferation of exotic weed species, or if extreme soil erosion presents a threat to natural features or processes. If revegetation is necessary following wildfire, only native plants or seed of native plant species will be used for seeding or propagation of plants; exceptions may occur for the use of short-term, transient non-native plants if determined by the natural areas ecologist to be warranted.

The Role of fire in the Development and Maintenance of this Native Ecosystem:

Douglas- fir / Pacific Madrone is a fire-dependent ecosystem. Cyclical disturbance maintains the structure and diversity that supports complex plant and animal communities. Douglas-fir are adapted to low intensity, high frequency fire regime. Fire models suggest that the west Cascades Douglas- fir / Pacific Madrone habitats historically experienced low intensity fires every 7-12 years on average, with stand replacing fires occurring only about every 275 years (US Forest Service, 2012). Fire history studies within the same or similar forest types in the San Juan Islands also support a relatively frequent, low-intensity fire regime, with intervals ranging from approximately 5 to 30 years (Bakker et al., 2019; Daniels & Gray, 2006; Everett et al., 2001; R.D Hammer & Peterson, D.L, 2001; Sprenger & Dunwiddie, 2011).

Fire regulates the density of vegetation in the understory. In many western forests more frequent fire used to prevent the buildup of fuels such as duff, litter and coarse woody debris on the forest floor. Fire ecology studies demonstrate that years of management practices which have suppressed more frequent and low intensity fires are correlated with more intense and ecologically damaging fires. In a natural forest fire regime, low intensity fires create self-maintaining Douglas- fir / Pacific Madrone ecosystems. Historically, low intensity fires were a part of indigenous land management practices used to improve the quantity, quality, and distribution of resources (Greenler et al., 2024; Long et al., 2021). Similarly, fire helps maintain species diversity in the understory by reducing cover of

competing vegetation and allowing sunlight and open space on the forest floor for a diversity of seeds to germinate and establish. This diverse understory is an important component in a healthy Douglas- fir / Madrone ecosystem, providing habitat and food resources for a variety of insects and animals.

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APPENDIX 2 Routine Management Actions for Point Doughty NAP

A base budget for routine management of the NAP will support Northwest Region Natural Areas staff, including all costs related to the site such as travel and materials. Funding typically comes in the form of the Natural Areas Program biennial state budget.

Costs associated with managing the NAP are expected to change over time due to general economic factors (such as inflation), identification of emerging land and resource management challenges, or to meet newly identified opportunities for research, environmental education or access. Most funding for maintenance and operations work comes from operating funding, which does not cover the cost of larger, more capital-intensive projects for which DNR seeks other funding.

Table 2-1. Routine Management Activities List Created January 2025

| Activity | Description | Estimated Staffing and Resources Required with Potential Fund Source |
|---------------------------------|---|--|
| Access facilities maintenance | <ul style="list-style-type: none"> • Maintain beach access stairs, trail and camp sites • Tend and maintain toilet | 3 staff weeks per FY |
| Weed Control — See map below | <ul style="list-style-type: none"> • English holly • English ivy • Himalayan blackberry • Scot's broom | 2 staff weeks per FY |
| Weed Monitoring | <ul style="list-style-type: none"> • Invasive species distribution mapping and treatment monitoring | 2 staff weeks per FY |
| Use Impacts Monitoring | <ul style="list-style-type: none"> • Monitor Impacts of uses in developed access areas • Monitor Impacts from unauthorized uses | 1 staff week per FY |
| Ecological Monitoring | <ul style="list-style-type: none"> • Monitor woodland plant community (Level 2 / 3 EIA, overstory measurements), once every 5 years | 1 staff week per FY 1 staff week per biennium for the natural areas ecologist |

| | | |
|-------------------------|--|---------------------|
| | | |
| Environmental Education | <ul style="list-style-type: none"> • Staff time to coordinate with YOEP | 1 staff week per FY |

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APPENDIX 3 Near-Term Project List for Point Doughty NAP

The one-time costs noted in Table 3-1 below should be pursued to complete necessary planning, and to make ongoing investments for site management, restoration, and enhancement.

Costs associated with implementing these projects are expected to change depending on how long it takes to fund and begin implementation of the project. Costs change because of various reasons including general economic factors (such as inflation), materials sourcing, and changes in the environment that affect project design. DNR pursues a variety of state and federal capital and grant funding to assist with land and resource management, restoration, research, and development of access and educational facilities, including development of educational curricula and materials by DNR's Youth Education and Outreach Program for use at this site.

This project list will be updated by the Natural Areas Program as projects are implemented and/or as new activities or new costs are identified.

Table 3-1. Priority Project Needs for Point Doughty NAP as of Winter 2025.

| Activity | Description | Estimated Staffing and Resources Required with Potential Fund Source |
|--|--|---|
| Property Line Survey | Survey/re-survey existing property line RE encroachment/trespass by neighbor | Region natural areas staff (2 staff weeks) \$50,000 for survey by contract Potential Funding: natural areas program operating budget (special allocation of funds); capital appropriation |
| Comprehensive Weed Survey | Fine-resolution survey for, and inventory of invasive species on the site | Region natural areas staff (4 staff weeks) Potential Funding: natural areas program operating budget (special allocation of funds) |
| Develop Integrated Weed Management Plan | Compile invasive plant inventory and develop integrated five-year weed management plan | Region natural areas staff (4 staff weeks) Potential Funding: natural areas program operating budget |
| Element Occurrence Ground Truth Mapping on the | Survey and reassess the Element Occurrence Boundary | Region natural areas staff (1 staff week) Potential Funding: natural areas program operating budget |

| | | |
|--|---|--|
| DNR-owned Property | | |
| Identify Ecological Boundary for the NAP | Assess whether plant associations protected in the NAP extend beyond the property line | natural heritage and/or Region natural areas staff (2 staff weeks) Potential Funding: natural heritage and/or natural areas program operating budget (special allocation of funds) |
| Bald Restoration | Survey and assess bald at NW tip of NAP for restoration needs | Region natural areas staff (8 staff weeks) \$50,000 for restoration costs Potential Funding: natural areas program operating budget (for assessment); RCO grant and/or capital funding for restoration costs |
| South Beach Access Bank Stabilization and Monitoring | Install, monitor, and maintain erosion control measures on bank adjacent to southern access stairs. | Region natural areas staff (2 staff weeks) \$2,000 for material costs Potential Funding: natural areas program operating budget (for assessment); recreation maintenance funds; RCO grant and/or capital funding for restoration costs |
| Camping Area Tent Pad Installation | Install tent pads at each campsite | Region natural areas staff (2 staff weeks) \$5,000 for materials costs Potential Funding: recreation maintenance funds; RCO grant and/or capital funding |
| Boot Brush Installation | Install boot brushes at both beach access points. Install signage to explain purpose to public. | Region natural areas staff (3 staff weeks) \$5,000 for materials costs Potential Funding: natural areas program operating budget |

(insert *map (s) related to projects in action plan above*))))

APPENDICES 4 through 13 available online

Location: www.dnr.wa.gov / Point Doughty as of (Under Development)

Appendix 4: Natural Heritage Program report including info on topography, geology, soils, hydrology, and additional conservation features

Appendix 5: Plant list

Appendix 6: Animal list

Appendix 7: Public Access Policy.

Appendix 8: Science, Research and Monitoring History

Appendix 9: Research Needs in Support of Site Management

Appendix 10: Management Goals and Actions for Priority Features

Appendix 11: Invasive Species Treatment Plan

Appendix 12: Staff Contact Information

Appendix 13: Restoration History