



**NATIONAL
CONSERVATION
LANDS**

Washington

San Juan Islands

National Monument

Annual Manager's Report — Fiscal Year 2016



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BLM's Ray Pease Mentoring an Orcas Youth Corps Member

1 San Juan Islands Profile

Designating Authority

Designating Authority: Presidential Proclamation 7318 – Establishment of the San Juan Islands National Monument

Date of Designation: March 25, 2013

Acreeage

Total Acres in Unit	961
BLM Acres	671
Other Federal Acres (Co-managed by BLM)	290

Contact Information

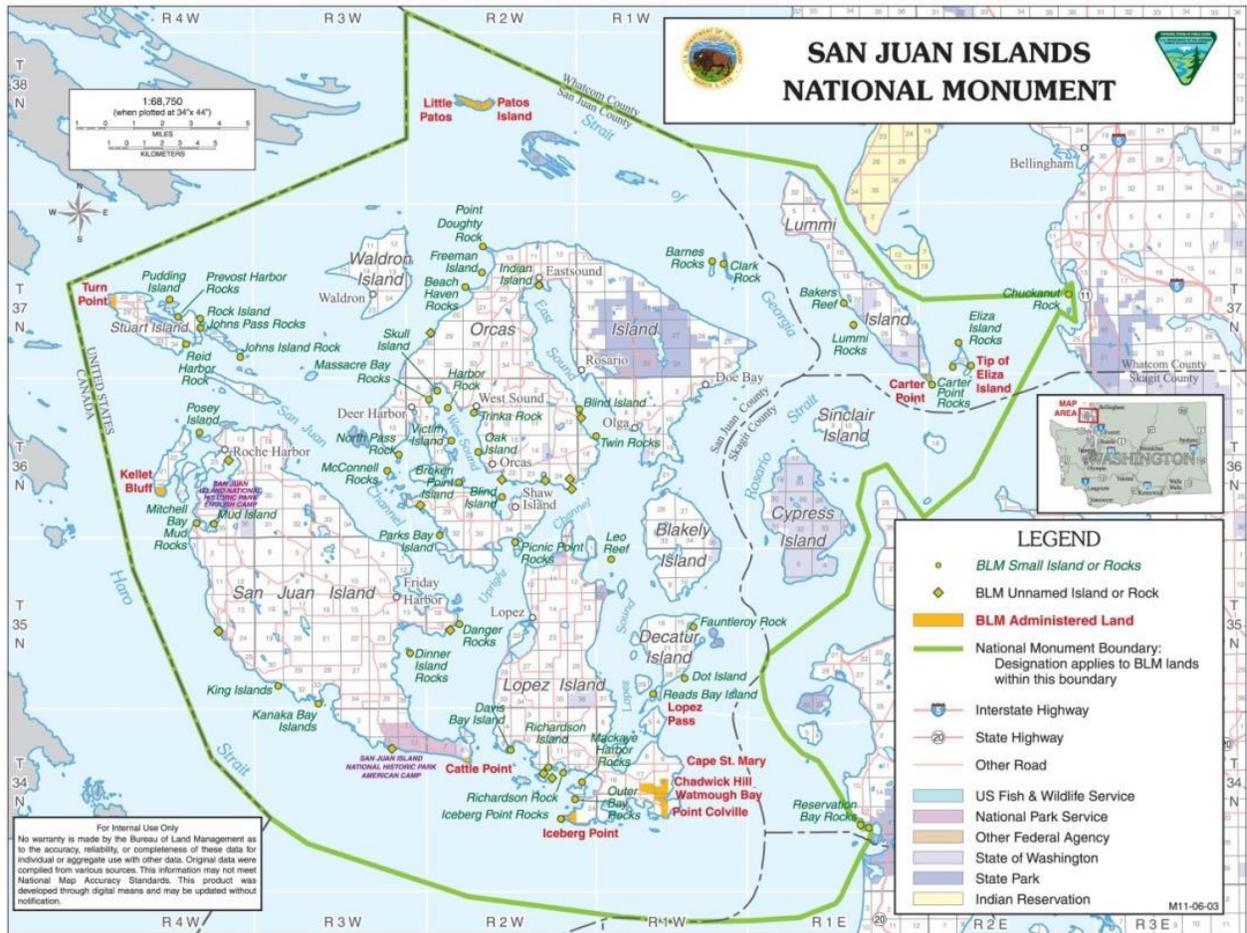
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District Office Name	Spokane
State Office Name	Oregon/Washington

Budget

Total Fiscal Year 2016 Budget	\$845,000
Subactivity 1711 (NM/NCA)	\$177,000
Subactivity 1610 (Land Use Planning)	\$663,000
Other Subactivities' Contributions	\$5,000

Map of San Juan Islands National Monument



Managing Partners

N/A

Staffing

1 Monument Manager	100%
1 Outdoor Recreation Planner	100%
1 Seasonal Recreation Specialist	50%
Spokane District Office (DO), Wenatchee and Border field office specialists	

Prior to monument designation, a seasonal employee was hired annually to assist the recreation planner to keep up with potential impacts or increased summer tourism. With monument status came a manager to manage programmatic relationships and goals.

The majority of science-based activities on the monument is accomplished through District resource leads working collaboratively with other federal, state, and county program leads in **forestry, botany, wildlife, restoration, and invasive species.**

The Spokane District **archaeologist, hazardous materials specialist, and engineer** have assisted in the ongoing restoration of the historic maritime architecture and settings. The archaeologist also is the lead for consultation activities with the State Historic Preservation Officer and ten tribal nations.

The San Juan Islands National Monument Planning Interdisciplinary team taps the employee talents and skills of the Border and Wenatchee Field Offices, the Spokane District Office, and the Oregon-Washington State Office. All resource needs are coordinated through the District Office, as well as coding, funding, and program tracking.

Each of those resource leads spends approximately **20%** of their time on individual projects for the islands, on NEPA analysis, and on the Resource Management Plan underway.

The Wenatchee Field Office **law enforcement officer (LEO)** presently manages and will continue to oversee cooperation with regional enforcement in the San Juan archipelago. He dedicates approximately **5%** of his time to the monument.

2 Planning and NEPA

Status of the Resource Management Plan Effort

Despite challenges of simultaneously working on another Resource Management Plan (RMP) for the balance of the Spokane District lands, the two planning leads have deftly managed to stay out of each other's way to support deadlines and meet original milestones.

Building on the positive foundation of the Scoping Report released in early fall of 2015, meetings with Cooperating Agencies and the Monument Advisory Committee (MAC) revealed where concerns might exist among the broader island community. Our efforts were redoubled to build local understanding and engagement in the NEPA process.

With the MAC we devised a strategic plan and vetted products and process. We created a pre-meeting video which was posted online and circulated to hundreds through our newsletter. We developed a brief PowerPoint presentation to assist the public and our partners in a methodical system for perceiving and addressing the landscape. As there are no extractive uses present on the monument, the primary impact that we are planning for is human use, so we decided to frame the analysis in that light. The outreach meeting design was to inform them of the extent of monument landscapes, and encourage them to comment, request, inform, or advise on any and all properties. Also, because the Trails and Travel Management Plan is being created simultaneous with the RMP, our maps displayed all of the existing trails, prompting feedback and guidance from our local experts.



Cooperating Agencies consider Planning Alternative Components



The Monument Advisory Committee weighs in on Human Use

In January we held Human Use-focused public meetings on Orcas, San Juan, and Lopez Islands, and in Anacortes. In total, 91 individuals provided 554 comments and there were nine additional emails and letters. In April at our next MAC meeting, we received additional comments from eight committee members and three members of the public. In all, 45 specific locations received comments with 19 locations receiving at least 5

comments each. These meetings also served to reconnect the public with the process, the complexity of the landscape and demands, and the staging necessary for science-based decisions. The Report and Supplement (copies of communications) were released shortly thereafter.

The *Analysis of the Management Situation* was released in May, with the Cooperating Agency representatives and the MAC suggesting that such a document should be posted online as a matter of course, for people to understand the complexity of the resources. Of course, it is online on the monument planning page, but it is worthy of consideration as a standard item accessible from the face page.

The Cooperating Agency representatives have thoroughly reviewed all of the resource alternatives and suggested edits to most, in both their abbreviated and more descriptive forms. In order to ensure that every reasonable scenario was considered, the BLM hosted a “floating planning tour” with Cooperating Agency representatives, MAC members, and other local land management organizations. With a resource listing for approximately 24 rocks and islands, and a map of the puzzle pieces of all



Cooperating Agencies, MAC Members, and Others Tackle Human Use and Socioeconomic Analysis

conservation lands in the archipelago, we visited each individually and reflected on how landscapes in each of these settings fared, what were the challenges, and what successes were evident. This was an extremely effective means for the whole management group to

understand the interdependence of our landscapes and need for collaboration in support of all local conservation needs and initiatives.

On the heels of this successful connection we sought to expand on our relationships with the ten consulting tribal nations. The Tulalip Tribe is regularly represented at the Cooperating Agencies meetings, and the Swinomish Tribe attends as time permits. The Samish Tribe participates through its representative holding a seat on the MAC. We sent another round of letters offering consultation to the other Tribal Governments in light of the timing for the draft release, as well as inviting all to a meeting and boat tour strictly for tribal representatives. When that day arrived, storms kept the boat ashore, but what transpired was the best of all possible circumstances. Essentially the Swinomish, Samish, and Lummi worked with the lead planner, the monument manager, the state tribal liaison, and the cultural resources specialist to highlight key landscapes and any potential challenges or concerns relating to traditional use areas. These conversations have gone a long way to promote further active engagement with our tribal partners.

Key National Environmental Policy Act Actions: US Coast Guard Landscapes

In FY16, work continued on final relinquishment of certain US Coast Guard (USCG) lands to the BLM. USCG made a visit to the San Juan Islands, primarily to appraise the engineering situation at Cattle Point, which they intend to repair with a new foundation before releasing that withdrawal. National Environmental Policy Act (NEPA) analysis of an easement across BLM-administered lands to reach USCG acreage was completed in 2016. While in the area, they also toured the Turn Point and Lime Kiln light stations.



USCG has an internal directive with prioritization for the release of certain landscapes. The status of BLM management of the setting will not change and all transfers are anticipated to be completed before the end of the RMP process.

USCG NEPA Specialists and Engineers examine Cattle Point Light

3 Year's Projects and Accomplishments

General Accomplishments

OR/WA NLCS State Strategy, Goal 2A: Emphasize an ecosystem-based approach to manage the NLCS in the context of the surrounding landscape.

The Terrestrial Managers Group (TMG), with a steering committee of BLM, San Juan Island National Historical Park (NPS), San Juan Islands National Wildlife Refuge (USFWS), San Juan County Parks and Recreation, Washington State Parks (State Parks), the San Juan County Land Bank (Land Bank), the San Juan Preservation Trust (Preservation Trust), and the San Juan County Conservation District (Conservation District) has continued to grow in capacity to address conservation in the islands at a large landscape level. Though they have no office in the islands, Washington State Department of Natural Resources (DNR) does have several key inholdings, so has joined the steering committee. NPS gained a new superintendent who made a quick study of the purpose and direction of the TMG and is already playing a major contributing role. Washington State Department of Fish and Wildlife has been a participant with a primary focus on the rare Island Marble Butterfly. This year, planning for this species of butterfly expanded from NPS American Camp, where it was rediscovered after nearly 100 years without any sightings, to include all land managers within its potential habitat along the south end of San Juan Island: USCG, DNR, and BLM. Prior to completion of our land use plan, the BLM is playing a role in public outreach and environmental education, which are certainly factors in any species survival plan.



Skull Island Spring Bloom

OR/WA NLCS State Strategy, Goal 2B: Adopt a cross-jurisdictional, community-based approach to landscape-level conservation planning and management.

The monument has created a TMG Assistance Agreement, with two partners signed on and two more planning to do so in FY17, in order to finesse the cooperative activities of resource sharing. A Service First agreement is in the works for the USFWS, NPS, and BLM. In the meantime, there has been informal sharing between all of these agencies, with monetary or labor resources administration accomplished on a case-by-case basis. This summer, NPS shared three weeks of their Northwest Youth Conservation Corps time to work collaboratively on monument lands.

OR/WA NLCS State Strategy, Goal 2C: Work with Tribes, State agencies, and Local communities to identify and protect lands that are critical to the long-term ecological sustainability of the landscape.

The TMG Annual Meeting in March had 73 attendees and was organized around the principles of *Leave No Trace* (LNT), the main conservation initiative for the county, driven by the TMG. The San Juan County Land Bank, an adjacent landowner in many locations, featured collaborative mapping for conservation and public access. They also hosted a tour of their *Salish Seeds* farm, the growth site for starts of local genetic stock, much of which continues to depend on our *Seeds of Success* program. Acquisition as a means of protection was featured and explained through the perspective of the individual land management agency missions and planning. Attendees were introduced to the cooperative effort among the organizations to address ecologically or culturally significant lands that may become available to purchase.



Cliffs at Iceberg Point, Lopez Island

OR/WA NLCS State Strategy, Goal 2D: Adopt a community-based approach to recreation and visitor services delivery consistent with the conservation purpose of the NLCS and the socio-economic goals of the local community.



Lopez Island Community ponders Sustainable Tourism

This year, the San Juan Visitors Bureau released a draft Tourism Master Plan elicited a great deal of interest. With the BLM's experience with visitor use impacts to natural settings, we were requested to lead a community discussion on Sustainable Tourism. Together with the Lopez Community Land Trust and the

Lopez Chamber of Commerce, the monument facilitated a discussion to help the community formulate a vision for visitor opportunities and positive impacts to local lifestyles. The discussion has moved to Orcas Island. Monument manager Marcia deChadenèdes was asked to join the team working on the Tourism Master Plan, and The Terrestrial Managers Group steering committee attended a workshop hosted by NPS to determine visitor capacity for the islands. The workshop showcased a series of research efforts to occur in following years, which will inform the Tourism Master Plan, as well as most agency land management planning documents. The BLM presently manages approximately .06% of the land base in the San Juan archipelago, and roughly 2% of the land in conservation status. However, because of our widespread presence and established communication networks, the monument continues to play a major role in the discussion.

Visitation in the San Juan Islands is estimated to be 1,000,000, occurring primarily in the months of May through September. Visitation to the monument is estimated to be 93,000.

Current Areas of Focus

OR/WA NLCS State Strategy, Goal 3A: Launch a long-term public awareness initiative about the BLM OR/WA's NLCS units, including statewide and local outreach, communications, and media plans.

While the monument is undergoing Resource Management Planning, the main focus is to develop effective outreach and environmental education programming. By developing stronger relationships with local communities, tribes, youth, veterans, and regional colleges, we create an infrastructure of stewardship that supports and influences the processes of planning and management. Additionally, when communities are aware of science-based decisions, their trust and desire to support initiatives is strengthened.

Education, Outreach, and Interpretation

OR/WA NLCS State Strategy, Goal Goal 3B: Advance and strengthen partnerships to facilitate shared stewardship and advance the relevance of the NLCS to communities of interest and place.

Coast Salish Mini University, a collaborative effort of BLM, NPS, and the Lummi Nation, accomplished its third year in the islands, through the generous support of the National Fish and Wildlife Foundation and the Potlatch Foundation. The additional funding, and unforeseen challenges, brought unexpected outcomes. Originally planned to integrate the San Juan Youth Corps, funding and schedule conflicts limited engagement to only the local leadership team. French Camp on Canoe Island volunteered their facility for a weeklong cultural learning retreat, and the University expanded to include engagement with many of the tribal elders and knowledge holders. Funds from the centennial celebration of NPS brought a canoe carver who constructed two new canoes with the Lummi youth, and the carving and installation of a totem pole and two story poles on the traditional Lummi landfall at British Camp, NPS.

The tribal community worked to ensure that their traditional knowledge will be protected and not compromised. Although the canoe and pole carvings were not part of the original



Samish Youth perform at the NPS Centennial Event

program design, the centennial event brought several hundred visitors to the park event, at least half of which were Native American. So this Mini University was instrumental in bringing leadership and elders together on the San Juan Islands, to acknowledge in ceremony their relationship with the future management and stewardship of these traditional sites.

OR/WA NLCS State Strategy, Goal 3E: Recruit and retain well-trained youth from diverse backgrounds for entry-level careers and engage youth in recreation, education, and stewardship on conservation lands.

The San Juan Island, Orcas Island, and Lopez Island Youth Conservation Corps, and the Northwest Youth Corps American Sign Language Inclusive Crews (NYC) all worked with monument employees on our landscapes this year! Monument lands opportunistically benefitted from NPS funds for youth corps, which underwrote programs that were able to serve on numerous partner landscapes.

Together we taught, managed, and hosted the islands' youth conservation corps with crews numbering up to twenty-four, made up of both middle and high school students. Each Island group learns from their own distinct landscapes, developing skills in trail building and maintenance, invasive species management, and small island and beach cleanups. These crews worked on eight different islands and have a sense of ownership through their accomplishments and the wildlife and natural settings they have cared for.

Many of these students are returnees from previous years, with great support from their parents. The Lopez Island Youth Conservation Corps operates out of the monument office in the summer, and brings a daily flood of hard-working youth to our work flow. Reflecting with the corps' leadership team, and with parents who drop in or wait for their kids at days' end, is very meaningful to our monument staff and volunteers, instilling a sense of compassion and appreciation for that in-between stage of life and novel learning opportunities. On Lopez, San Juan, and Orcas Islands, the end of year celebrations are much like a graduation event, with youth visibly touched with emotion and parents and land managers beaming with pride for these budding conservationists.



San Juan Island Youth Conservation Corps members map Invasive Species with BLM's Debi Plummer

The NW Youth Corps is a new program that is designed to engage hearing impaired youth, an under-represented population, to mentoring, educational, and vocational experiences in the outdoors. The unemployment statistic for this young adult group is 51% in Washington State, and the opportunity to utilize their talents was economically reasonable. In the San Juan Islands, this crew was engaged in numerous physically challenging and complex projects. These young folks were quick studies and achieved peak functioning in short

order. Following the close of their summer program, these same young people were seen returning to the islands, camping, biking, and dancing at local events. Again, it is hard to measure the significance that public lands have on youthful outlooks. As John Muir said, “In every walk with nature, one receives far more than he seeks.”

OR/WA NLCS State Strategy, Goal 2D: Adopt a community-based approach to recreation and visitor services delivery consistent with the conservation purpose of the NLCS and the socio-economic goals of the local community.

LNT in the San Juans has grown since the county became the first in the USA to formally incorporate these principles into their management practices. A set of the seven principles—the San Juan Seven—were adapted and approved by the national organization. As the Washington State Ferry is the way that the majority of the public travels to the islands, TMG partnered with the ferry system to offer three continuously running videos that teach LNT. A repeat three-day workshop tour by the LNT Trainers offered learning experiences on the three main islands at Saturday Markets, parks and schools. All interpretive signage being generated throughout the archipelago includes this messaging. A beautiful ten-minute film was generated as a capstone project for two senior high school students. It has gained national circulation and is now in the documentary film festival circuit.



<https://vimeo.com/164518530>

Our **monthly monument newsletter** has proven to be an effective form of outreach with an almost 50% opening rate. The regular snapshot of three or four news bites and notices may contribute to the high rate of public attendance at our public events, including our National Public Lands Day, which engaged 240 people over two days in training for citizen science bird monitoring and a kayak beach cleanup.

Hands on the Land (HOL) in Chadwick Marsh continues to be a popular program with the Lopez Elementary School Science Club. Now entering its third year, in FY16 the education specialists of the *San Juan Nature Institute* garnered a LEAF grant, which expanded the program's opportunity base in a special way with the purchase of three canoes and a supply of paddles and flotation vests. Another HOL grant at year end paid for two special education programs, one featuring Rosie Cayou regarding Traditional Ecological Knowledge, and another bringing a guest entomologist to the marsh. A pending application for another LEAF grant will hopefully fund FY17 programming in advance rather than speculating on agency budgets. In anticipation of funding challenges, the monument is entering into an assistance agreement with Lopez School District in order to pool funds to sustain the program over time.



Hands on the Land at Chadwick Marsh, Lopez School Science Club



Camas flower and Bee

Monument education partner, ***Kwiaht***, gained a National Fish and Wildlife grant this year, to engage Skagit Community College students, veterans, and tribal youth in mapping special status plants and pollinators on Iceberg Point. As a shared recipient of a *Hands on the Land (HOL)* grant, ***Kwiaht*** purchased four tablet computers, trained Lopez Elementary School students in pollinator mapping, and sponsored a field trip to San Juan Island where they participated in the NPS annual bioblitz. ***Kwiaht*** just entered into an assistance agreement with the monument to run HOL at Cattle

Point starting this fall. This program will continue to focus on plants and pollinators, engaging Friday Harbor Elementary School in mapping plants, identifying their key pollinator species, and collecting and growing seed in the school's greenhouse. We also cosponsored with ***Kwiaht*** our most successful National Public Lands Day event this year, likely in part due to the popularity of ***Kwiaht*** among students.

Team Rubicon, the military veteran firefighting team, in partnership with the BLM, returned to the San Juan Islands to work with Orcas Island Fire and Rescue. The wildfire class

offered four days of training sessions in the basics of firefighter deployment, the Incident Command System, and safety skills. A total of 56 Firefighting Qualification Cards (Red Cards) were issued as a result of this training.

The monument hosts natural and cultural history programs in partnership with the **Lopez Library**. Together we presented two very popular programs, the *Future of Weather Prediction in a Changing Climate*, and *Mount Baker and the Cascades, a Geological History*. As part of our NPLD programming, University of Washington professor Julia Parrish presented *Seas of Change: Marine Birds as Sentinels of a Warming Ocean*. In late fall 2015, the Library also hosted the Monument's Iceberg Point Community Consensus meeting and two Iceberg Point Community Trails Mapping and Interpretive Planning meetings. This year, we're undertaking extensive planning for Wildfire programming in the fall and Native American Heritage Month in November.

Partnerships

OR/WA NLCS State Strategy, Goal 3B: Advance and strengthen partnerships to facilitate shared stewardship and advance the relevance of the NLCS to communities of interest and place.

Turn Point Lighthouse Preservation Society has managed another phenomenally successful year. The completion and reinstallation of the rehabilitated Fog Signal Building windows, painstakingly accomplished mostly by volunteers, has restored the visage of the central building which has been boarded up since the 1970's. A grant from the License plate Education Fund (LEP) also made possible a very expensive re-creation and



Window and Door Restoration, Fog Signal Building, Turn Point

installation of the traditional doors, replacing more old plywood. With the original fenestration and mulleins, a finely crafted, classic structure has been reborn.

The lighthouse museum has been moved from the Mule Barn into the Fog Signal Building, and several remarkable donations of historic furniture, flags, and artifacts have followed.

The Oil Storage Building, immediately behind the Fog Signal building, has opened as an orca whale interpretive center. With sound recordings, education materials and identification posters of each of the 83 resident orcas, this exhibit is very useful to the oft visited island.

After setting up the water catchment to funnel rainwater from the Mule Barn roof into an old cistern, a replica of the original hand pump was installed, providing an outstanding interpretive element, as well as a non-potable water source for cleaning.

For nine weeks during the summer, pairs of docents greet the public and share the history of the light station, touring them through the staged Keepers Quarters residence, the orca interpretive center in the Oil Storage building, and the museum, sharing the stories of the keepers, as well as the impressive restoration efforts that our partners have made possible. The partner group has generated a new self-guided tour brochure that serves year round and in the off hours, while recruiting new members and docents to the organization.

Keepers of the Patos Light (KOPL) continues its dedicated service to assisting the monument with visitor management on Patos Island. From the months of May through September, KOPL hosts a monthly work day to address invasive species management, trail and campsite maintenance, and beach cleanups. Also, during summer weekends, the partners host docents to keep the lighthouse open, with ferrying accomplished by Washington State Parks, which manages the Patos campgrounds through a Memorandum of Understanding with the BLM.

Since the Patos Light restoration eight years ago, a makeshift collection of cardboard posters has displayed information about the island, photos from past families, and a biography of Helen Glidden, the author of *A Light on the Island*. All of these materials have become worn and warped, so last year the monument hosted an interpretive planning process



Work Party en route to Patos Island

for the lighthouse. Based on that process, key themes were identified. This year, KOPL used the plan to successfully compete for a grant from the License plate Education Foundation to generate exhibits for the lighthouse interior. The LEP grant specifically funded 8 of 10 panels, excluding two panels that highlighted the natural history of, and tribal activities on, Patos Island. As a veteran museum educator and certified interpretive planner, the monument manager is now working with KOPL in the generation of those eight panels, as well as the two unfunded panels, which can more appropriately be designed in partnership with the tribes. The exhibits are expected to be completed by June 2017.

OR/WA NLCS State Strategy, Goal 1B: Expand understanding of the NLCS values through assessment, inventory, and monitoring.



Monument Manager Marcia deChadenèdes with Asha Lela in Washington DC

The Iceberg Point Area of Critical Environmental Concern Volunteer Monitors are in their 26th year. This year, their founder and coordinator, Asha Lela, was awarded the BLM Volunteer Lifetime Achievement award, which she had the good fortune to be in Washington DC to receive. Asha was present for the signing of the Presidential Proclamation three years earlier, so already had a warm relationship with several of the BLM leaders. She was very honored to receive the recognition, but in her usual way

took advantage of the pulpit to charge the agency with pressing further for conservation, for community engagement, and community relationships. She graciously shared the award with all of her volunteers in the ceremony.

The monitors continue to safeguard the resource daily, removing trash, noting trends in recreation uses, discouraging campers, sharing local observations of flora and beach seasonal changes, and encouraging owners to leash their dogs. Some monitoring has been captured digitally, which is drawing a younger volunteer. Some monitors have decided to more directly confront visitors who are behaving outside of the rules of the management area, which creates an interesting level of interaction with visitors. Semi-annual reports summarize the data collected and provide progressive panoramic photographs.

Volunteers



Washington Water Trails Work Party

OR/WA NLCS State Strategy, Goal 3C: Expand use of volunteers within the NLCS.

For many reasons the Monument continues to be extremely popular with volunteers. In 2016, our figures represent 80% of the total number of volunteer hours in all of the Spokane District (Washington State). Our volunteer population is often well educated and has retired to the islands nearest to the monument landscapes. Generally, people choose to retire on the islands for outdoor opportunities, so the reward for volunteering is both internal and external. Our Outdoor Recreation Planner, Nick Teague, is a very engaging employee, and these people want to work with him. On Lopez Island last year, Nick and his wife, Susie, won the *Spirit of Lopez Award*. He consistently does an outstanding job of engendering public support.

With 10,924 hours, the value that our volunteers bring to public service is \$252,017.00.

Land (or Interests in Land) Acquisitions

N/A

4 Science

The San Juan Islands National Monument serves as an outdoor laboratory that attracts a variety of scientists, university researchers and their students. ~ Proclamation 7318

Science

Coastal forests that have never been harvested, rare lichens, bats and butterflies, anthropogenic landscapes, and archaeological sites exposed by storm-washed shorelines—all of these characteristics and more make for an energized community of scientists and universities, as well as tribal groups seeking to reconnect with indigenous ways of knowing science. While baseline data is a goal, the ongoing monitoring of these features by various academic and environmental groups also informs our daily decisions for protection and preservation.

The islands have a large population of retired professors and scientists, many of whom are recruited to our volunteer monitoring teams. Naturalists with other kinds of academic backgrounds also spend a great deal of energy researching ecosystem activities, as do youth programs, summer camps, and school groups. The Islands have a strong, protective constituency that monitors activities to ensure that there is no unauthorized collecting nor unsafe or resource damaging actions.



Lee Side of Patos Island

Research Initiatives

An FY2016 National Conservation Lands Science Grant was awarded for the identification and mapping of pollinators to their key species of plants on monument lands, particularly special status species, tying the results to public education and awareness.

The original applicant for the grant was our education partner, *Kwiaht*. When the funding was cycled through the Grants.gov process, another applicant emerged with world renowned expertise in this field. As that applicant's partner is the lead investigating scientist engaged for nearly five years in the Island Marble Butterfly recovery initiative, so this applicant was already very familiar with the island landscapes and pollinators.

We decided to split the grant between the two applicants according to their strengths. *Kwiaht* is now responsible for public outreach and education, for which they are well qualified and very popular. And Dr. Julie Combs is conducting the research linking pollinators to special species plants.

COASTAL MEADOWS: ICEBERG POINT, LOPEZ ISLAND

Insects: pollinators

<p>Black-Tail Bumblebee <i>Bombus melanopygus</i> A long-distance flyer, this is the islands' most widespread bumblebee, and an important pollinator of large blue, purple and pink wildflowers.</p>			<p>Digger Bee <i>Anthophora bomboides</i> It looks like a bumblebee but has a yellow (not black) face and digs solitary nests in soft sandy clay sea bluffs, capped with mud stoppers!</p>
<p>Wool-Carder Bee <i>Anthidium tenuiflorae</i> This gentle midsummer bee is often mistaken for a wasp, it weaves a lining for its buried nest from plant fibers combed off stems and leaves.</p>			<p>Striped Sweat Bee <i>Halictus tripartitus</i> One of many very small dark species that visit flowers too small for larger bees. Nests are simple short underground tunnels near food sources.</p>
<p>Death Camas Bee <i>Andrena astragalii</i> A solitary miner bee that lays its eggs in tiny tunnels near Death Camas patches, and stores only Death Camas nectar and pollen for its larvae!</p>			<p>Green Sweat Bee <i>Agapostemon texanus</i> This lovely metallic bee visits yellow and white flowers in early spring and late summer. Females take turns guarding a large aggregation of nests!</p>
<p>Long-Horned Bee <i>Eucera frater</i> Males are easily recognized by their long antennae that help them locate scattered, solitary females. Their nests are short underground tunnels.</p>			<p>Gooseberry Hoverfly <i>Syrphus ribesii</i> It's not a bee or a wasp but a pollen-eating fly disguised to fool predators! It hovers over flowers like a tiny helicopter. And its larvae eat aphids!</p>
<p>Tight-Spangled Hoverfly <i>Spilomixia citrima</i> These wasp mimics have long antennae, for flies, and yellow stripes on their eyes. They buzz and threaten, but are harmless summer pollinators.</p>			<p>Sulfur Ball-Bearing Fly <i>Sphaerophoria sulfuripes</i> Thin and dainty, with wasp-like stripes, this fly appears in late summer on white flowers, eats nectar and pollen, and lays its eggs wherever it finds aphids.</p>
<p>Send Wasp <i>Bembix americana</i> Shy and harmless, these boldly striped green-eyed wasps dig small nest holes in sandy trails and bury flies in them—to feed their larvae when they hatch!</p>			<p>Cuckoo Leafcutter Bee <i>Coelioxys rufitarsis</i> Cuckoo bees are disguised so that they can sneak into nests of other bees to lay their eggs. Cuckoo larvae eat up all of the pollen stored in the nest.</p>

Produced by Kwiaht for the San Juan Islands National Monument. Photographs by Russel Barsh. For more information on the Iceberg Point ecosystem visit www.kwiaht.org or write to kwiaht@gmail.com

Kwiaht Outreach Publication

5

Resources, Objects, Values, and Stressors

Native American Sites

The Coast Salish people often lived in villages of wooden-plank houses and used numerous smaller sites for fishing and harvesting shellfish. In addition to collecting edible plants, and hunting various birds and mammals, native people used fire to maintain meadows of the nutritionally rich great camas. Archaeological remains of the villages, camps, and processing sites are located throughout these lands; including shell middens, reef net locations, and burial sites.

—Presidential Proclamation, March 25, 2013—

To date there are no intensive studies for the location of Native American sites. One of the overarching goals of monument management is to build a mutually trusting relationship with and among the ten tribal nations who consult on monument decisions. It is assumed that the tribes know where these sites are, and concerted efforts are underway to engage those tribes in planning and protection efforts. Trees and native weedy species are encroaching on recorded coastal use locations. Roughly 40 percent of the monument bears evidence of agricultural use, such as camas and Garry oaks in fire-managed landscapes, and middens visible along most coastlines indicate where shellfish food processing occurred.

Collaborative efforts continue, fostering incremental successes in connection with the Samish Indian Nation, Stillaguamish Tribe of Indians, Tulalip Tribes of Washington, the Swinomish Indian Tribal Community, and the Lummi Nation. Other tribes have contacted us and prefer to listen until further notice. The monument manager was invited to the annual Coast Salish Gathering, a meeting for the local tribal governments. She also facilitated a session in *Collaboration with Integrity* at the Indigenous Ways of Informal Science Education conference in Albuquerque in 2015, and presented on it in Washington DC in 2016, at the grant report to the National Science Foundation.

Native American Sites Status and Trends

Status of Resource, Object, or Value	Trend
Fair	Relatively stable, minimal recreation, local users are sensitive to soil disruption.

Native American Sites Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY16
961	400	400	400



Midden washing out of Feeder Bluffs, San Juan Island

Stressors Affecting Native American Sites

There are two primary stressors on this resource. The San Juan Islands archipelago is situated on a major marine highway for delivery of fossil fuels. The potential for a spill has been well researched by the National Oceanic and Atmospheric Administration (NOAA) and is said to have increased dramatically between 1992 and 2011. The impact of a spill to sensitive shorelines and traditional sites is of great concern—to the BLM, the tribes, and the communities at large. The second challenge, and an immediate concern, is the more extreme winter storm pattern, attributed to climate change, which erodes culturally sensitive shoreline areas.

Historic Lighthouses

In the late 19th century, the Federal Government built several structures to aid in maritime navigation. Two light stations and their associated buildings are located on lands administered by the Bureau of Land Management (BLM): Patos Island Light Station (National Register of Historic Places, 1977) and Turn Point Light Station (Washington State Register of Historic Places, 1978).

—Presidential Proclamation, March 25, 2013—

Turn Point Light Station has continued on its trend of care and restoration. This maritime heritage landscape has had a great many individuals pulling for it in the last year, and the results show.

Patos Island Lighthouse is stable in status and awaits next year, when it will receive its new exhibits. A favorite among campers, anyone who spends a day working on the remote

island is approached by visitors who want to share their devotion for the setting.

Historic Lighthouses Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable and improving with regular upkeep. In process of total restoration. Hazardous materials mitigation is nearly complete.

Historic Lighthouses Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY16
961	50	50	50



Container Ship Navigating the Turn Point in Haro Strait

Stressors Affecting Historic Lighthouses

Patos Lighthouse and Turn Point Light Station are, from a distance, pictures of a romantic history that conjure imaginative stories. Up close, they offer remarkably sturdy testimonials to stalwart caretaking against the wild weather patterns. There is no disappointment to these sites, only solitude and dramatic beauty. Both of these light stations have had substantive care by the partners and BLM in the last decade, and are far along the path to total restoration.

Challenges to the goals of restoration of these resources would be the brief window for work time annually, due to weather, coupled with financial constraints for an historic feature lacking a current management plan. More than 23,000 people visit the islands

annually, yet the quality of experience has been managed well by the partners and land managers, with no significant human impacts.

A critical concern for both of these resources is lack of wildfire suppression. There are no natural sources of water at either location, and rainfall is not significant, so catchments would not be useful in this regard. No fire plans are in place, but managers are aware of this issue and are pursuing its resolution.

Another concern for these landscapes is their vulnerability to potential damage from oil spills. Several organizations in the islands, including the NOAA, conduct drift card tests from multiple locations in the Salish Sea. Turn Point is consistently the most vulnerable location, should an accident occur, and Patos is without measurement because timely response to such a remote site is unlikely. As oil tanker size and numbers have increased over the last decade, the risk to these historic treasures increases dramatically.

Diverse Habitats

These lands contain a dramatic and unusual diversity of habitats, with forests, woodlands, grasslands, and wetlands intermixed with rocky balds, bluffs, inter-tidal areas, and sandy beaches. The stands of forests and open woodlands, some of which are several hundred years old, include a majestic assemblage of trees, such as Douglas fir, red cedar, western hemlock, Oregon maple, Garry oak, and Pacific madrone. The fire-dependent grasslands, which are also susceptible to invasive species, are home to chick lupine, historically significant great camas, brittle cactus, and the threatened golden paintbrush. Rocky balds and bluffs are home to over 200 species of moss that are extremely sensitive to disturbance and trampling.

—Presidential Proclamation, March 25, 2013—



Lopez Prickly Pear

Diverse Habitats Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Relatively stable with few hot spots of social trails, mud holes and invasive species, due to increased visitation and limited ability to manage.

Diverse Habitats Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY16
961	710	710	710

Stressors Affecting Diverse Habitats

There are few stressors other than being over-loved, which is distressing to local communities. However, education initiatives, landscape recovery efforts, and sustainable tourism discussions and workshops have eased the concerns. Overall, there is a high degree of naturalness for much of these landscapes. Coastal bluffs and shorelines are eroding due to seasonal storms. Invasive plants spread from cultivated areas and developments, but these activities are primarily limited to high-traffic areas. The nonnative mustards attributed with the recovery of the Island Marble Butterfly were prolific this year.



Storms on Kellet Bluff

Interpretive displays highlighting the values and sensitivities of diverse habitats are under construction, so community response is on an upward swing.

Wildlife

Marine mammals, including orcas, seals, and porpoises, attract a regular stream of wildlife watchers. Native, terrestrial mammals include black-tail deer, river otter, mink, several bats, and the Shaw Island vole. Raptors, such as bald eagles and peregrine falcons, are commonly observed ...Varied seabirds and terrestrial birds can also be found here, including the threatened marbled murrelet and the recently reintroduced western bluebird.

The island marble butterfly, once thought to be extinct, is currently limited to a small population in the San Juan Islands.

—Presidential Proclamation, March 25, 2013—

This year has been the year for birds. Our National Public Lands Day celebrated the International Migratory Bird Convention, with birding stations and courses in photography and monitoring science. Our school partners and environmental science partners lead regular bird walks and post monthly counts, and beach cleanups are a means to protecting wildlife. The peregrine falcons returned to Watmough Bay after an absence of several years.



Spring Street School Tidal Plastics Study

Wildlife Status and Trend Table

Status of Resource, Object, or Value	Trend
Good	Stable

Wildlife Inventory, Assessment, Monitoring Table

Acres in Unit	Acres Inventoried	Acres Possessing Object	Acres Monitored in FY16
961	400	400	400

Stressors Affecting Wildlife

Until the agency has established a baseline for the balance of our landscapes for these resources, identified stressors are conjecture. Much of the natural habitat is intact and, apart from the primary tourism spots, the balance of wildlife populations seems unaffected. Again, the increased potential of an oil spill in the Salish Sea presents an increased risk of grave impacts to species that are dependent on the marine environment. Vulnerable aspects of this environment would include rocks for resting, roosting and nesting, bays and protected areas that serve as salmon nurseries, and marine life forms that are food sources. The Iceberg Monitors have indicated a perceived lessening of birds on the south end of Lopez Island, with increased noise levels from Navy overflights being a major environmental change over the last few years.



Kayak Beach Cleanup, NPLD

6 Summary of Performance Measures

This summary reflects a remarkable status for a relatively new national monument with very few restrictive practices in place. All of the islands that are regularly accessed by visitors also have a high level of caretaking, especially by volunteers and public partners. There is a culture of stewardship for this monument that surpasses many because it is tied to the community's larger vision, a commitment to conservation for the archipelago.

With the monument status comes an increased interest by the public and the agency to know the details of the unexplored places, the rocks and smaller islands that serve wildlife in a manner similar to that of the surrounding wilderness of the San Juan Islands National Wildlife Refuge. This is ideal timing for the agency to generate baseline data, not only to inform the resource management plan that is underway, but also to improve our awareness of and responsiveness to threats to wildlife and Native American sites.

Resources, Objects, and Values Status Summary Table		
Resource, Object, or Value	Status	Trend
Native American Sites	Fair	Relatively stable
Historic Lighthouses	Good	Stable and improving
Diverse Habitats	Good	Stable
Wildlife	Good	Stable



Indian Island, Eastsound, WA

7 Manager's Letter

Every year that we continue to build relationships with our fellow agencies and our communities, the possibilities for remarkable outcomes multiplies. As it is with most cherished landscapes, the story is also about the caretakers and the maturation of objectives. As our partners evolve, so too does our capacity. This year the new NPS superintendent added an energy and power to the initiative to connect with the local tribes, strengthening the federal partner relationship for today's youth and future generations. The Terrestrial Managers Group has become a supportive family, seeking opportunities to assist each other, as well as meet our own missions. The Spokane District also changed after a year of study and practice, functionally merging with the Coeur d'Alene District in Idaho to bring greater efficiencies for resource management. All of these evolutions required a commitment of energy and focus that was often daunting. But the outcomes are exciting, challenging, and rich with potential.

In this year we also had some very sad losses to our circles, with the unexpected passing of two partner's board members and also an outstanding volunteer. We were all stunned, in fact, by our vulnerability while coping with the transitions. Every day that we connect with a volunteer recruited to a program developed by one those three people, we reflect with gratitude for having been part of their team, their spirit and vision. We are charged with continuing to meet the goals that those folks helped to shape, and for which they devoted so much of their time. We are fortunate in many ways that the monument exists to bring us together with such quality souls, as well as to protect and inspire awareness for the value of the relationships that we have with nature and culture.

We press on, strengthening our ability to serve the landscapes, the communities, and the greater organizations that sustain us; our own agencies and the foundations that nurture our partners. New interns and volunteers sign on, bringing new facets to this jewel-like setting. We are grateful for the roles we all play in the protection, conservation and restoration of these significant resources, objects and values, and for the pleasure of collaborating with new champions.



Intern Tahoma Wrublsky, South Lopez Sound Monitoring



**NATIONAL
CONSERVATION
LANDS**

San Juan Islands National Monument



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