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Sable Island

National Park Reserve of Canada

Management Plan

2019



2019

Sable Island

National Park Reserve of Canada

Management Plan

Her Majesty the Queen in Right of Canada, represented
by the Chief Executive Officer of Parks Canada, 2019.

SABLE ISLAND NATIONAL PARK RESERVE OF CANADA MANAGEMENT PLAN, 2019.

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For more information about the management plan or about
SABLE ISLAND NATIONAL PARK RESERVE:

Sable Island National Park Reserve
1869 Upper Water Street, Suite AH-201
Halifax, Nova Scotia
B3J 1S9

Tel: 902-426-1993 Fax: 902-426-1775
Email: pc.sable.pc@canada.ca
www.pc.gc.ca/sable

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bottom: D. Garside*

Foreword



Canada's national parks, national historic sites and national marine conservation areas belong to all Canadians and offer truly Canadian experiences.

These special places make up one of the finest and most extensive systems of protected natural and cultural heritage areas in the world.

The Government is committed to preserving our natural and cultural heritage, expanding the system of protected places and contributing to the recovery of species-at-risk. At the same time, we must continue to offer new and innovative visitor and outreach programs and activities so that more Canadians can experience Parks Canada places and learn about our environment, history and culture.

This first management plan for Sable Island National Park Reserve of Canada supports this vision.

Management plans are developed through extensive consultation and input from various people and organizations, including Indigenous peoples, local and regional residents, visitors and the dedicated team at Parks Canada.

National parks, national historic sites and national marine conservation areas are a priority for the Government of Canada. I would like to thank everyone who contributed to this plan for their commitment and spirit of co-operation.

As the Minister responsible for Parks Canada, I applaud this collaborative effort and I am pleased to approve the Sable Island National Park Reserve of Canada Management Plan.

Catherine McKenna

*Minister of Environment and Climate Change and
Minister responsible for Parks Canada*

Recommendations

Recommended by:

Michael Nadler
Acting Chief Executive Officer
Parks Canada

Trevor Swerdfager
Senior Vice-President, Operations
Parks Canada

Julie Tompa
Field Unit Superintendent
Mainland Nova Scotia Field Unit
Parks Canada

Executive Summary

Sable Island National Park Reserve was established in 2013 as Canada's 43rd national park to protect 31 km² of land within the Atlantic Coast Uplands Natural Region of the national parks system. Located 290 km southeast of Halifax, Nova Scotia, at the edge of the Continental Shelf, Sable Island is one of Canada's furthest offshore islands. A thin crescent of shifting sand, the island's shape and size are constantly changing due to the action of wind and waves.

In this first management plan, a vision is set for the future of Sable Island National Park Reserve. Paramount to this vision is furthering our understanding of the park's natural and cultural heritage, so that we can better protect and present it for future generations. Underlying all areas of this management plan is Parks Canada's commitment to the protection of ecological integrity. Through its vision, as well as its supporting strategies and objectives, the plan serves as the main guide for all aspects of park management and is an important accountability document for Canadians as to how the park will be managed.

Parks Canada did not develop this guide alone; participation by Canadians, including the Mi'kmaq of Nova Scotia, partners, stakeholders, and youth, was instrumental in shaping the management plan's direction. Taking into consideration the extensive feedback that was received through consultation, experience gained over five years of park management, and ongoing conversations with Sable Island's vast community of knowledge holders, three key strategies have been identified to guide the management of the park for the next ten years and to support the achievement of its vision.

Key Strategy 1: Protection in the context of past and future change - focuses on building our understanding of this unique site, to better inform the management of its natural and cultural heritage, while monitoring and implementing measures for protection in support of conservation.

Key Strategy 2: Inspiring connections that build support for conservation - focuses on the facilitation of connections and captivating experiences that will ultimately inspire support for the conservation of Sable Island National Park Reserve.

Key Strategy 3: Sustainability, innovation and efficient operations - focuses on increasing the operational efficiencies, reducing greenhouse gas emissions and removing unusable infrastructure, while enhancing sustainability into the future.

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1.0 Introduction

Parks Canada manages one of the finest and most extensive systems of protected natural and historic places in the world. The Agency's mandate is to protect and present these places for the benefit and enjoyment of current and future generations. Future-oriented, strategic management of each national park, national marine conservation area, heritage canal and those national historic sites administered by Parks Canada supports the Agency's vision:

Canada's treasured natural and historic places will be a living legacy, connecting hearts and minds to a stronger, deeper understanding of the very essence of Canada.

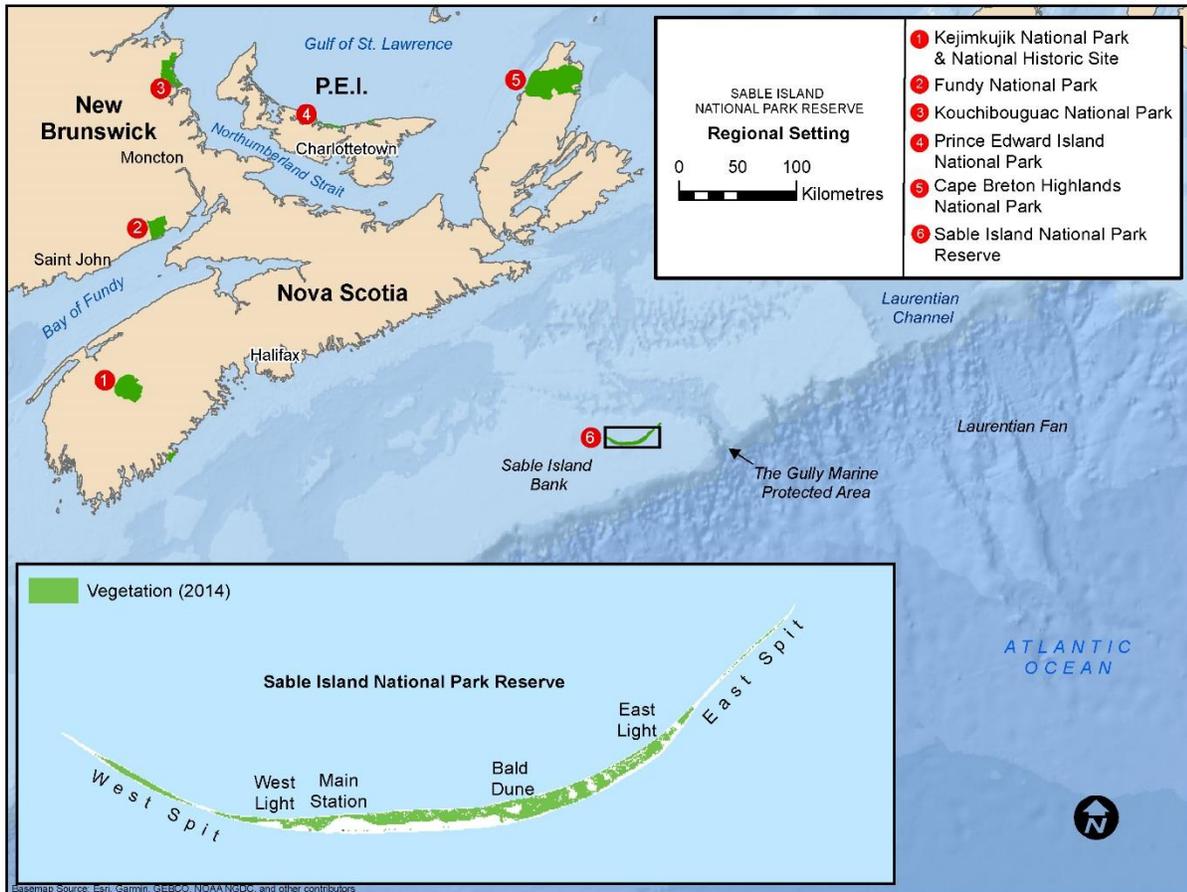
The *Canada National Parks Act* and the *Parks Canada Agency Act* require Parks Canada to prepare a management plan for each national park. The *Sable Island National Park Reserve of Canada Management Plan*, once approved by the Minister responsible for Parks Canada and tabled in Parliament, ensures Parks Canada's accountability to Canadians, outlining how park management will achieve measurable results in support of the Agency's mandate.

Canadians, including the Mi'kmaq of Nova Scotia, partners, and stakeholders, were involved in the preparation of the management plan, helping to shape the future direction of the national park reserve. Special effort was also made to engage youth – the next generation of park stewards – throughout its development.

The plan sets clear, strategic direction for the management and operation of Sable Island National Park Reserve by articulating a vision, key strategies and objectives. Parks Canada will report annually to Canadians on progress toward achieving the plan objectives and will review the plan every ten years or sooner if required.

This plan is not an end in and of itself. Parks Canada will maintain an open dialogue on the implementation of the management plan, to ensure that it remains relevant and meaningful. The plan will serve as the focus for ongoing engagement on the management of Sable Island National Park Reserve in years to come.

Map 1: Regional Setting



2.0 Significance of Sable Island National Park Reserve

Sable Island National Park Reserve was established in 2013 as Canada's 43rd national park. It protects and presents a 31 km² crescent of land within the Atlantic Coast Uplands Natural Region of the national park system. Sable Island was also designated a Migratory Bird Sanctuary in 1977 under the *Migratory Birds Sanctuary Act*, in recognition of the abundance and diversity of breeding migratory birds that take refuge there.

Sable Island is one of Canada's furthest offshore islands, located in the Atlantic Ocean. This crescent shaped island of dynamic rolling sand dunes is home to a wild horse population, the world's largest breeding colony of grey seals, and species that are found here and nowhere else on earth. The island is a testament to adaptation and survival, a place to witness change and marvel at survival in an unlikely environment.

The majesty and mysteries of Sable Island have intrigued researchers and artists for generations. Its unique location offers an opportunity to comprehend our world and our impacts on its farthest reaches. The forces of nature dominate all life here, past and present.

Prior to park establishment, Sable Island had been stewarded by various government departments for over 200 years. Documented knowledge and use of Sable Island by mariners dates back to the early 16th century, for whom the island posed a major navigational hazard - with more than 300 recorded shipwrecks, the island became infamously known as 'The Graveyard of the Atlantic.' In 1801 the Nova Scotia government established the first life-saving station on Sable Island in an effort to reduce the suffering and loss of life and cargo resulting from these frequent shipwrecks. Since 1801 there has been continuous human presence on Sable Island.

Although there currently exists no evidence of human use prior to the 16th century, Sable Island may have been visited by earlier seafaring people, including the Mi'kmaq, given the available watercraft technology of the time, as well as the island's larger size and proximity to the mainland during the last glacial period.

Significant geomorphological change has - and continues to - alter the size and shape of Sable Island. The island is approximately 42 km long and 1.3 km across at its widest point, though its exact dimensions change continually due to the intense action of wind, waves, and storms. The park boundary extends to the low water mark of the island. Dynamic by nature, environmental change is a defining characteristic of the island and is expected to be further accelerated by climate change.

In this first management plan, understanding the risks and accelerated rates of environmental change plays a central role in planning and managing all aspects of Sable Island National Park Reserve, from monitoring its ecological integrity to improving the sustainability of its infrastructure. In general, the first ten years of park management will be characterized by a commitment to question, explore and understand how best to protect and present this national treasure, including its rich natural and cultural heritage.

3.0 Planning Context

Indigenous peoples: The national park reserve designation reflects an outstanding asserted claim by the Mi'kmaq of Nova Scotia (Mi'kmaq) to aboriginal rights to Sable Island. These asserted claims are unresolved and Sable Island National Park Reserve is not a subject matter of the current negotiations between Canada, the Province of Nova Scotia and the Mi'kmaq of Nova Scotia in the Made-in-Nova Scotia Process.

Parks Canada and the Mi'kmaq of Nova Scotia have agreed to work together collaboratively on the Sable Island National Park Reserve Management Plan through the *Terms of Reference for a Mi'kmaq-Nova Scotia-Canada Consultation Process*.

Human heritage and legacy of use: Sable Island has a rich heritage of human use and occupation. It has been home to many families and supported various activities, from lifesaving stations first established in 1801 to rescue shipwreck survivors and the subsistence farming that sustained them, to trans-Atlantic communications and long-term climatic monitoring services. Evidence of Sable Island's human history remains present in the form of its famed horses, heritage resources, old buildings, and debris. A significant portfolio of assets and related environmental liabilities were present at the time of park establishment; reducing the physical infrastructure no longer required, as well as greenhouse gas emissions, will be a significant focus throughout the lifespan of this management plan.

A base of operations and research in the North Atlantic: Sable Island continues to function as a base for government and non-government operations in the North Atlantic. Parks Canada works collaboratively with Environment and Climate Change Canada, Fisheries and Oceans Canada, NAV CANADA, the Canadian Armed Forces, and the Province of Nova Scotia to facilitate their interests, activities and programs on the island. Long-term research and monitoring activities, including climatological monitoring, wildlife research, magnetic observations, and a variety of other studies, continue to be administered at Sable Island National Park Reserve.

Off-shore petroleum related activities: Sable Island National Park Reserve's legislative framework prohibits exploratory and development drilling for petroleum on or within one nautical mile of Sable Island. Continued access to the island for emergency response capacity for offshore activities, and low impact seismic, geological or geophysical programs can be permitted. The Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) regulates offshore activities and has a responsibility to consult with Parks Canada in advance of resource exploration activities. The CNSOPB requires that all operators working in the vicinity of the island have a Sable Island Code of Practice in place. The Impact Assessment Agency of Canada (IAAC) leads environmental assessments of exploration drilling and development programs in the Nova Scotia offshore area. Parks Canada will continue to work with the CNSOPB and IAAC to ensure that the protection of Sable Island National Park Reserve is taken into full consideration in their regulation of exploration and development activities in the offshore.

Visitation: Sable Island has hosted visitors for hundreds of years. Prior to its establishment as a national park, visitation was managed by the Canadian Coast Guard, during which time the island accommodated 50-200 visitors annually. Interest in visiting Sable Island National Park Reserve has grown since that time; there were approximately 450 visitors to Sable Island in 2017 and in 2018. All visitation is managed by Parks Canada through a visitor registration process. The majority of visitors (~75%) arrive by expedition vessels (guided in small groups on the island), with the remainder arriving by chartered aircraft and private vessels. Feedback from public and stakeholder engagement at the time of park establishment indicated support for well-managed visitor experience opportunities on Sable Island, and this interest was confirmed through consultation on the management plan.

Island access: Accessing Sable Island National Park Reserve is inherently challenging due to its remote offshore location and unpredictable environmental conditions (e.g. fog, wind, flooded landing conditions). The current access model to support park operations relies on fixed wing aircraft landing on the hard-packed sand of South Beach, or vessel support to move bulk cargo; both means are subject to weather and beach conditions, which impacts the ability to reliably schedule operational activities as well as programming related to visitor experience, research, and asset management. There are

two helicopter landing pads, one of which is only functional from September to April each year, to protect the tern colony in the immediate area from May to August.

Key issues identified in State of the Park assessment report: A State of the Park assessment of Parks Canada heritage places aims to assess established indicators in areas such as ecological integrity and cultural heritage, among others, and must be conducted every ten years for places requiring a management plan. As a newly established national park, there exists insufficient data to complete the ratings for many of the State of the Park assessment indicators. The data collected for Sable Island National Park Reserve's first State of the Park assessment will serve as a baseline for future reporting. Many of the key issues identified through this assessment focus on knowledge gaps that impact management of the site. Areas in which to increase understanding include: ecological integrity, cultural heritage and cultural resource inventories and condition ratings, and the risks and rates of environmental change (including geomorphological and climate change).

4.0 Development of this Management Plan

In order to facilitate meaningful opportunities for the public to contribute to Sable Island National Park Reserve's management plan, the *Let's Talk Sable Island!* consultation approach was developed to promote participation by all Canadians, locally and nationally, using a variety of in-person and online methods. Consultation with the Mi'kmaq of Nova Scotia was conducted pursuant to the *Terms of Reference for a Mi'kmaq-Nova Scotia-Canada Consultation Process*.

Phase one consultation (October 26, 2018 – December 9, 2018) focused on refining elements of the vision and exploring opportunities and challenges related to park management, prior to the development of a draft management plan. Four principal topics were explored, including: refining the vision for Sable Island National Park Reserve; understanding ecological health; guiding sustainable visitation; and sharing Sable Island's natural and cultural history.

Phase two consultation (May 10, 2019 – June 9, 2019) provided Canadians with an opportunity to review and comment on the draft management plan.

A variety of approaches were developed to collect feedback from stakeholders, Canadians locally and nationally, and youth. A stakeholder workshop was held with over 35 participants representing a wide range of sectors and communities. An online engagement platform – www.letstalksableisland.ca - was developed to facilitate the collection of feedback through a diversity of tools. Group Kits were developed to facilitate group discussion and enabled a coordinated response from groups and organizations.

Recognizing both the need and challenge of engaging youth (aged 18–24), the next generation of park stewards, special consideration has been given to increase their participation in public consultation. A 'Youth Advisory Panel' was established to engage youth in the development of consultation content, and to better understand their needs and expectations.

The many thoughtful responses received during the *Let's Talk Sable Island!* consultation processes are a testament to the strong connection Canadians feel for this special place. Parks Canada received more than 2,200 responses to the requests for input.

This management plan was developed based on the input received during two phases of consultation, ongoing discussion with Sable Island's vast community of knowledge holders, input from Parks Canada subject matter experts and experience gained over five years of park management.

5.0 Vision

The vision presented below expresses the future desired state of Sable Island National Park Reserve in 15 to 20 years. The key elements arose through consultation with Canadians, including the Mi'kmaq of Nova Scotia, partners and stakeholders at the time of park establishment (2010), and were refined through further consultation and engagement during the development of this park management plan.

Far out in the North Atlantic, perched on the edge of the continental shelf, sits a wild and windswept island of sand, its iconic crescent shape seemingly emerging out of nowhere amidst this great expanse of sea. Isolated and remote, this is one of Canada's furthest offshore islands. The forces of nature dominate all life here, past, present, and future. This is a place to witness change and marvel at the resiliency of life.

Sable Island National Park Reserve was established to protect this place, including its unique biodiversity, its storied human history and its wild spirit, and ensure that Sable Island continues to be appreciated and enjoyed by Canadians. Its protection, above all else, is entrusted to Parks Canada on behalf of Canadians, and Parks Canada in turn relies upon the experience and expertise that exist within a community of knowledge holders.

It is through this community that Sable Island is understood, protected and appreciated. Building on its legacy as a place for government, non-government, academic and artistic pursuits, this sustainable, green park operation contributes to the advancement of science and conservation issues of local and global significance, and continues to inspire new perspectives, creations, and connections that have yet to be revealed.

The natural and cultural heritage of the island has been shaped by the dynamic natural forces that govern all life here, and by the people who have lived on this island. Here, carefully-managed visitation promotes the protection of the natural and cultural heritage for which the island is valued. It is also a place that is explored from afar. Through innovative use of technology and the help of partners and stakeholders, Sable Island National Park Reserve is accessible from our homes and communities, for all of those who share a curiosity and passion for its fragile yet resilient shores.

6.0 Key Strategies

Three key strategies frame the management direction for Sable Island National Park Reserve for the next 10 years. The strategies and corresponding objectives and targets focus on achieving the vision for the park through an integrated approach to park management. Targets have been prioritized with specific dates where feasible. Where no dates have been referenced, the target will be achieved within the period of the plan based on opportunities, annual priorities and capacity of Parks Canada. Annual implementation updates will be provided to the Mi'kmaq of Nova Scotia, partners, stakeholders, and the general public.

Key Strategy 1: Protection in the context of past and future change

Since Sable Island was established as a national park reserve in 2013, significant progress has been made to implement an ecological monitoring program with established measures which will serve as a baseline to monitor conditions into the future. The research community has helped to shape this program and contributes a significant base

of knowledge regarding various aspects, including the interface and influence of the broader marine environment. There is still much to learn given the dynamic nature and the complexities of a remote offshore island. Change is a defining feature of Sable Island's existence. Its size and shape have dramatically shifted over time, as have its biodiversity, availability of fresh surface water, and human use. Climate change is anticipated to further accelerate rates of change through increasing the frequency and intensity of storms and sea level rise.

Protecting Sable Island National Park Reserve's highly valued natural and cultural heritage requires an understanding of how the island has changed - and continues to change - through time. Knowing what resources to protect and how to protect them in the context of its ever-shifting sands and dynamic environment is paramount to achieving this strategy, as is the support and expertise of Mi'kmaq, partners and stakeholders. The Mi'kmaq worldview that everything is connected and the principles of "two-eyed seeing," involving both western science and Mi'kmaq knowledge, Netukulimk (stewardship), and Msit no'kmaq (all my relations) will provide greater opportunities to understand and achieve management objectives.

Objective 1.1

An understanding of rates of environmental change, and their associated risks at Sable Island National Park Reserve is developed with Mi'kmaq, partners and stakeholders and is applied to all aspects of park management and operations.

Targets

- Within seven years, a solid understanding is developed of both the past and predicted future rates of change of shape and size of the island's dune systems (geomorphology);
- Within seven years, risks of climate change to ecosystems and infrastructure are understood;
- Within seven years, updated vulnerability and risk assessments for biodiversity and infrastructure are completed, and appropriate mitigations are developed and implemented where possible within the lifespan of this plan;
- Within five years, ponds and groundwater regimes are modelled, enabling risks to the island's freshwater resources to be understood and further protected; and
- Parks Canada is actively involved in the impact assessment processes associated with any proposed oil and gas activities in the vicinity of the park, ensuring that the protection of Sable Island National Park Reserve is taken into consideration.

Objective 1.2

Increased knowledge of Sable Island National Park Reserve's natural and cultural resources informs evidence-based decision making in support of protection of the island.

Targets

- All ecological integrity monitoring measures provide reliable status and trend data on ecological health for the next State of Park assessment report;
- Through engagement with the Mi'kmaq, the monitoring and management of natural and cultural resources reflect the principles of "two-eyed seeing," Netukulimk (stewardship), and Msit no'kmaq (all my relations);
- Current and recommended recovery actions are implemented for species at risk identified in the Species at Risk Site Analysis Report prepared for Sable Island National Park Reserve;
- A recovery strategy and action plan for the Sable Island sweat bee are completed and implemented to ensure protection of the species and its critical habitat;
- Rare and endemic insects have been assessed, their status as species at risk on Sable Island has been determined, and any species at risk recovery planning requirements are met;

- Sable Island's naturalized horse population continues to be protected as wildlife and research focusing on them has increased knowledge about their health, population dynamics, and ecological role on Sable Island;
- The ecological role of grey seals on the island is better understood;
- Within five years, an inventory of potential archaeological sites will be completed, the condition of all known artifacts (archaeological objects) and archaeological sites has been assessed, and protocols for the documentation of newly discovered artifacts and sites are implemented within two years;
- In the event that cultural resources are found that pertain to the Mi'kmaq, these resources will be managed collaboratively with the Mi'kmaq and where applicable, protocols from the Assembly of Nova Scotia Mi'kmaq regarding human remains, grave sites and burial sites will be respected;
- At least ten oral history interviews have been conducted and the information gathered is used to increase the understanding of the cultural resources on the island; and
- Within five years, a shared understanding of heritage values is developed through engagement of Mi'kmaq, partners and stakeholders.

Objective 1.3

Resource management decisions are understood and supported by Canadians; citizen science volunteer opportunities facilitate a deeper level of understanding and contribute to resource monitoring programs.

Targets

- Knowledge gained through research and monitoring activities relating to natural and cultural heritage is regularly shared with target audiences, through on-site activities as well as through off-site and online outreach education;
- Opportunities for the engagement of Mi'kmaw youth have been identified; and
- Within five years, meaningful citizen science or volunteer opportunities have been explored for target audiences, to support research and monitoring programs.

Key Strategy 2: Inspiring connections that build support for conservation

A sense of connection to Sable Island exists in the hearts and minds of many Canadians and people from around the globe through art, science, literature and lore. This legacy will continue at Sable Island National Park Reserve through carefully managed opportunities for visitors, artists, and researchers to support its conservation: when people experience Sable Island, they appreciate, love, and care for it, becoming ambassadors for its stewardship. First-hand experiences can also inspire creative expressions and scientific intrigue that, when shared with others, can multiply and create new connections. By working with partners, researchers, artists, visitors and collaborators, this strategy seeks to facilitate and enhance Canadians' sense of connection to the park, through experiences that are available to diverse audiences - including youth - onsite, offsite and online.

Visitation to Sable Island National Park Reserve is managed through a registration process and is currently limited to day trip experiences, with the majority of visitors arriving by expedition ship. While visitor feedback indicates high levels of satisfaction, there are opportunities to work with partners to further enhance and enrich day trip experiences, and to foster deeper understanding and lasting connection with the island. This will be the focus, along with expanding outreach opportunities to share diverse stories about Sable Island.

Objective 2.1

Sable Island National Park Reserve will seek the expertise of Mi'kmaq, partners and stakeholders to develop carefully managed opportunities for people to visit and experience the park in ways that align with the park's vision.

Targets

- Within one year, a *Visitor Experience Strategy* is developed, identifying visitor experience opportunities and products aligned with target markets;
- Within one year, a *Code of Ethics* for responsible visitation, developed with input from Mi'kmaq, partners and stakeholders and based on the *Best Management Practice for Visitor Use** is implemented;
- Opportunities for day experiences that celebrate and share Sable Island National Park Reserve's natural and cultural heritage have been developed for target markets, and universal accessibility of visitor experiences is explored;
- Opportunities for multi-day experiences (with limited accommodations on the island or on a boat) have been explored in collaboration with partners;
- Within three years, all visits are facilitated by a Parks Canada employee or guide who is trained and accredited through a recognized program and/or approved by Parks Canada; and
- Opportunities for visitation by the Mi'kmaq, by youth, and others who may not otherwise have access to Sable Island are facilitated through partnerships and volunteerism.

* *The Best Management Practice for Visitor Use defines the mitigation measures (e.g. protocols to protect the ecosystems against transportation of pathogens, seeds, insects to the island; management of human-wildlife interaction; protection of vegetation, ponds, cultural resources; group size; guiding requirements, etc.) that will be used to minimize potential negative impact to the natural and cultural resources (by, for example, stipulating conditions in business licences for expedition operators, and providing important information for visitors prior to and upon arrival to the island).*

Objective 2.2

All Island users, including employees, visitors, researchers, artists, contractors and tour operators, understand and comply with visitor use best management practices, supporting low impact, safe, and positive experiences.

Targets

- *The Best Management Practice for Visitor Use* is developed and adopted to guide all visitation to the park to ensure protection of natural and cultural resources;
- Every person going to the island receives a mandatory pre-visit orientation on park regulations and visitor use best management practices to ensure protection of ecological integrity, cultural resources, and visitor safety;
- Collaboration with tour and expedition cruise ship operators promotes understanding and awareness of park messages and visitor use best practices;
- Impacts of visitor and researcher activities are monitored, and ecological impacts detected have led to modifications in programming and permitted use of the island; and
- Business licenses are approved only for tour and expedition ship operators that comply with operational requirements of the business license, including visitor use best management practices, and revenue collection.

Objective 2.3

Sable Island National Park Reserve will cultivate a sense of connection and grow its community of ambassadors, through regular and ongoing communication, and a commitment to innovation in sharing the park's natural and cultural heritage.

Targets

- Research findings, fascinating stories, experiences, and operational updates are shared with targeted audiences through various channels, such as the national open data portal, the Sable Island National Park Reserve website, and social media platforms;
- Innovative and engaging multimedia productions that promote understanding and support for park programs across broad audiences are created through collaborations with Parks Canada; and
- Opportunities are facilitated for artists and researchers whose work supports park objectives to present and share their work, through exhibits, conferences, social media, and other outreach education opportunities.

Objective 2.4

Strategic partnerships are assessed and implemented that support a conservation ethic amongst key audiences, and that increase the reach and relevancy of Sable Island's natural and cultural heritage.

Targets

- Off-island experiential opportunities are facilitated through innovative approaches and technology;
- Targeted initiatives that engage youth and build awareness about Sable Island National Park Reserve in the next generation of park stewards are identified; and
- Partnerships that support research and art are generating new perspectives, ideas, and connections that will bring Sable Island National Park Reserve to new audiences.

Key Strategy 3: Sustainability, innovation, and efficient operations

Sable Island's off-shore location and harsh weather conditions necessitate a safe base of operations for park staff and other island users. Operating in a remote environment is challenging and costly, and there are opportunities to evaluate needs, infrastructure, energy requirements and waste management to ensure sustainability into the future. This strategy aims to demonstrate Sable Island National Park Reserve's commitment to innovation and ingenuity in its use of green technology to ensure an efficient operation in a remote environment. A more sustainable and green operation will support safe, positive experiences for park users. Through reduced greenhouse gas emissions, removal of unused infrastructure and restoration of the land, this strategy will help to support Parks Canada's commitment to conservation and improvement of ecological integrity.

Objective 3.1

Increase efficiency and functionality of operational infrastructure for all park users, while reducing the overall fossil fuel and infrastructure footprint of Sable Island National Park Reserve's operations.

Targets

- Within three years, an infrastructure plan is designed to meet the needs of all park users, and is responsive to the island's unique and harsh environment;
- Within five years, a 50% reduction in fossil fuels for operational activities at Main Station has been achieved;

- Surplus assets are being decommissioned and all serviceable infrastructure is being rationalized to reduce the footprint and optimize operations;
- Greater efficiency has been achieved through infrastructure planning and consolidation of operational functions resulting in fewer redundancies and less waste;
- Opportunities to reduce waste that travels to and from the island are explored and implemented; and
- Within three years, a standardized fee schedule has been implemented to support improved sustainability of island operations.

7.0 Zoning

Parks Canada's national park zoning system is an integrated approach to the classification of land and water areas in a national park and designates where particular activities can occur on land or water, based on the ability to support those uses. The zoning system has five categories:

- Zone I - Special Preservation;
- Zone II - Wilderness;
- Zone III – Natural Environment;
- Zone IV - Outdoor Recreation; and
- Zone V - Park Services.

This management plan establishes the first zoning plan for Sable Island National Park Reserve, including Zone I, II, III and IV areas. There are no Zone V areas proposed as this designation is not applicable in the Sable Island National Park Reserve context. The boundaries of the zones are based on the most current geospatial data about Sable Island's natural and cultural resources that are available. The island's geomorphology is constantly changing, therefore the geospatial locations presented in maps 2-5 are subject to change.

Zone I – Special Preservation

This zone describes areas within a national park that require special preservation because they contain unique, threatened, or endangered natural or cultural features. Preservation is the key consideration. Motorized access is not permitted. Where an area is too fragile to allow public access, every effort will be made to provide park visitors with off-site programs and exhibits interpreting the area's special characteristics.

The following areas are identified as Zone I and together account for 0.7 % of the park reserve:

- **Roseate Tern Critical Habitat at East Light:**
In order to protect critical habitat for endangered roseate terns, this Zone I designation will be in effect from the time roseate terns arrive to nest until they leave (May 1 to August 31). These dates may change if ongoing monitoring indicates that the arrival/departure dates for terns is changing. Outside of the nesting period, this area will be Zone II.
- **Freshwater Ponds:**
There are several freshwater ponds on Sable Island that are essential to maintaining the island's current biodiversity. The number and total surface area of freshwater ponds have decreased through time. All freshwater pond ecosystems, including a 5 metre buffer to protect sensitive pond edge vegetation, are designated Zone I areas.

Zone II – Wilderness

This category contains extensive areas that are good representations of a natural region and are conserved in a wilderness state. The perpetuation of ecosystems with minimal human interference is the key consideration. Zone II areas offer opportunities for visitors to experience firsthand the park's ecosystems and require few, if any, services and facilities. In much of Zone II (70% of park reserve area), visitors have the opportunity to experience remoteness and solitude. Motorized access is not permitted except strictly controlled motorized access for research, park operations and outreach and education activities relating to the park that are authorized by Parks Canada and are consistent with Parks Canada policy and regulations.

In keeping with Parks Canada policy, the vast majority of Sable Island National Park Reserve is Zone II. This includes all vegetated areas of the island, embryo dunes on South Beach, non-vegetated areas within the interior of the island (except zone III crossings), the West Spit bounded by Autumn's Crossing, and the East Spit bounded by East Crossing.

Zone III – Natural Environment

Areas that are managed as natural environments provide opportunities for visitors to experience a park's natural and cultural heritage values through outdoor recreation activities, requiring minimal services or facilities of a rustic nature. While motorized access may be allowed, it will be carefully controlled.

Operational activities on Sable Island National Park Reserve require motorized vehicle use. This use will be permitted in Zone III (29% of the park reserve areas) including: perimeter beach areas (defined as areas between the scarp of vegetated dunes and ocean), the West Light fenced area which contains infrastructure and requires regular access by motorized vehicle, and five designated island crossings. Crossings are existing sand corridors that are approximately 5 metres wide and permit travel between the North and South sides of the Island.

Controlled access by fixed-wing aircraft, helicopter and boat will be permitted in Zone III.

Zone IV – Outdoor Recreation

Outdoor recreation areas are capable of accommodating a broad range of opportunities for understanding, appreciation and enjoyment of the park's heritage values and related essential services and facilities (e.g., park operation and administrative functions) in ways that impact the ecological integrity of the park to the smallest extent possible. Access by motorized vehicles is allowed.

Specifically for Sable Island National Park Reserve, the operational and administrative functions are centralized within Main Station, which has been assigned Zone IV (0.3% area of park reserve). This area includes operational infrastructure contained within a fenced area, a helipad, and a surrounding heath buffer area. The helipad is not in use from May to August to protect the tern colony in the immediate area.

Zone V – Park Services

Zone V is applied to major park operation and administrative functions. There are no Zone V areas included on Sable Island National Park Reserve.

Environmentally Sensitive Sites / Culturally Sensitive Sites

Environmentally Sensitive Sites (ESS) and Culturally Sensitive Sites (CSS) are designated on the zoning maps where an area is either too small to be designated as a discrete Zone I or because a site may be variable from one year to the next. Recognition as an ESS or CSS ensures that the values for which a site has been designated are protected and respected in any park management decisions or actions. There is one recognized ESS and five recognized CSSs at Sable Island National Park Reserve:

Ecologically Sensitive Sites

ESS1 Tern Colony

There has been a tern colony at this location since at least 1998, although the colony increased dramatically in size starting in 2006 and it is now one of two main colonies on the island (the other colony is in a Zone I special preservation area). In 2016, 1873 pairs of terns nested here, comprised of 95% common terns, and 5% Arctic terns.

Culturally Sensitive Sites

CSS1 Number 3 Lifesaving Station

This area includes significant architectural and artifact evidence of the exposed and below grade buildings associated with the Number 3 lifesaving station. In addition, there are also substantial numbers of pre-lifesaving (1801) artifacts located that are clear evidence of an earlier 18th century occupation.

CSS2 East Lighthouse and Life Saving Station

In addition to the well-defined archaeological remains of the original East Light House, the area includes a minimum of 22 additional unique archaeological sites associated with remnant structural and artifact evidence of both the lighthouse and lifesaving operation at East Light.

CSS3 Old Main Station

While only six archaeological sites have been identified on the surface of “Old Main Station,” as the most intensively occupied area of Sable Island during the 19th and 20th centuries, there are substantial below grade archaeological resources associated with the numerous buildings and occupation zones. This is confirmed by a preliminary ground penetrating radar assessment in 2018.

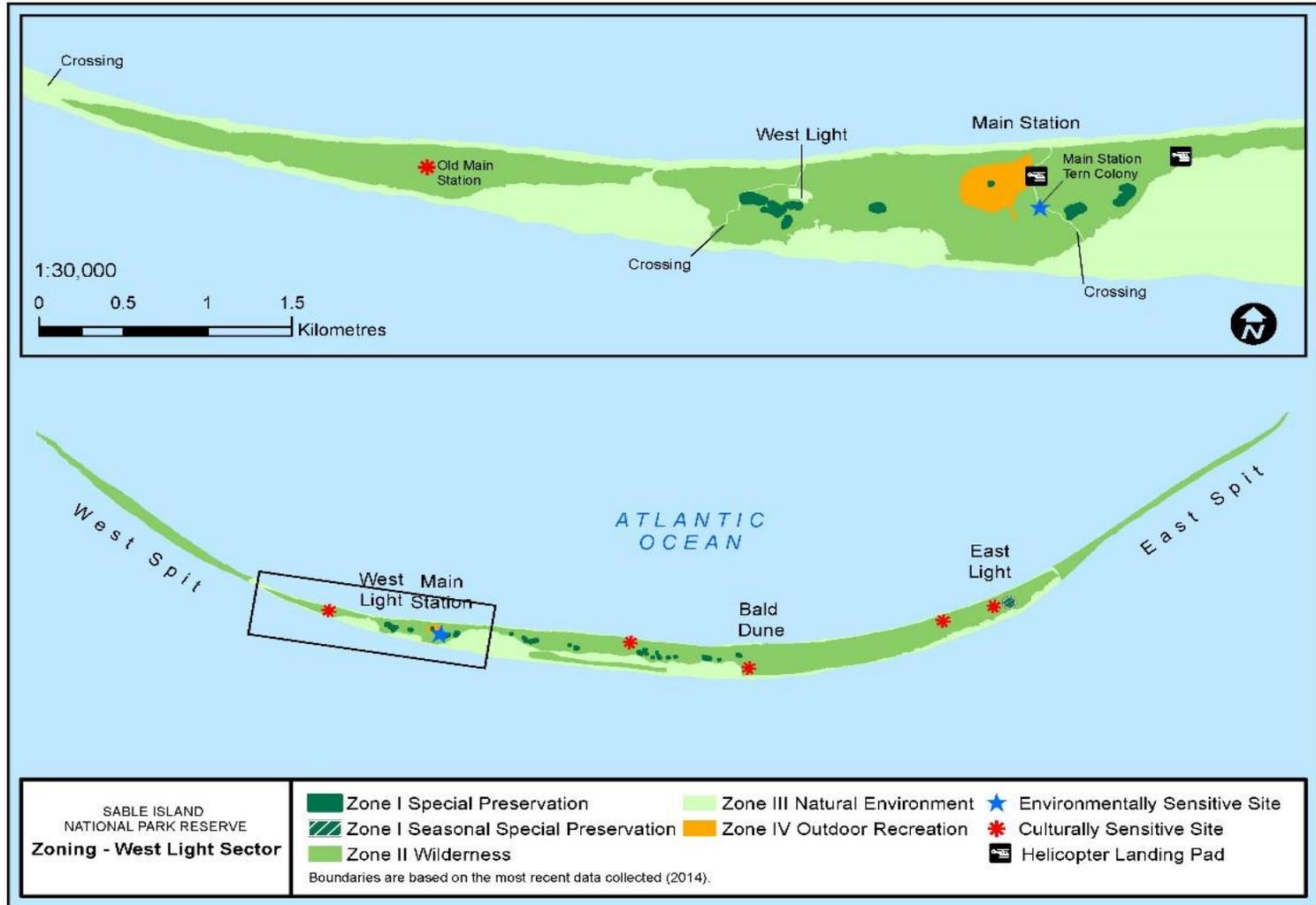
CSS4 Number 2 Lifesaving Station

There are only four archaeological sites associated with the Number 2 Lifesaving station. Much of this site is currently below surface with occasional sand “blowouts” revealing structural evidence of the main house site.

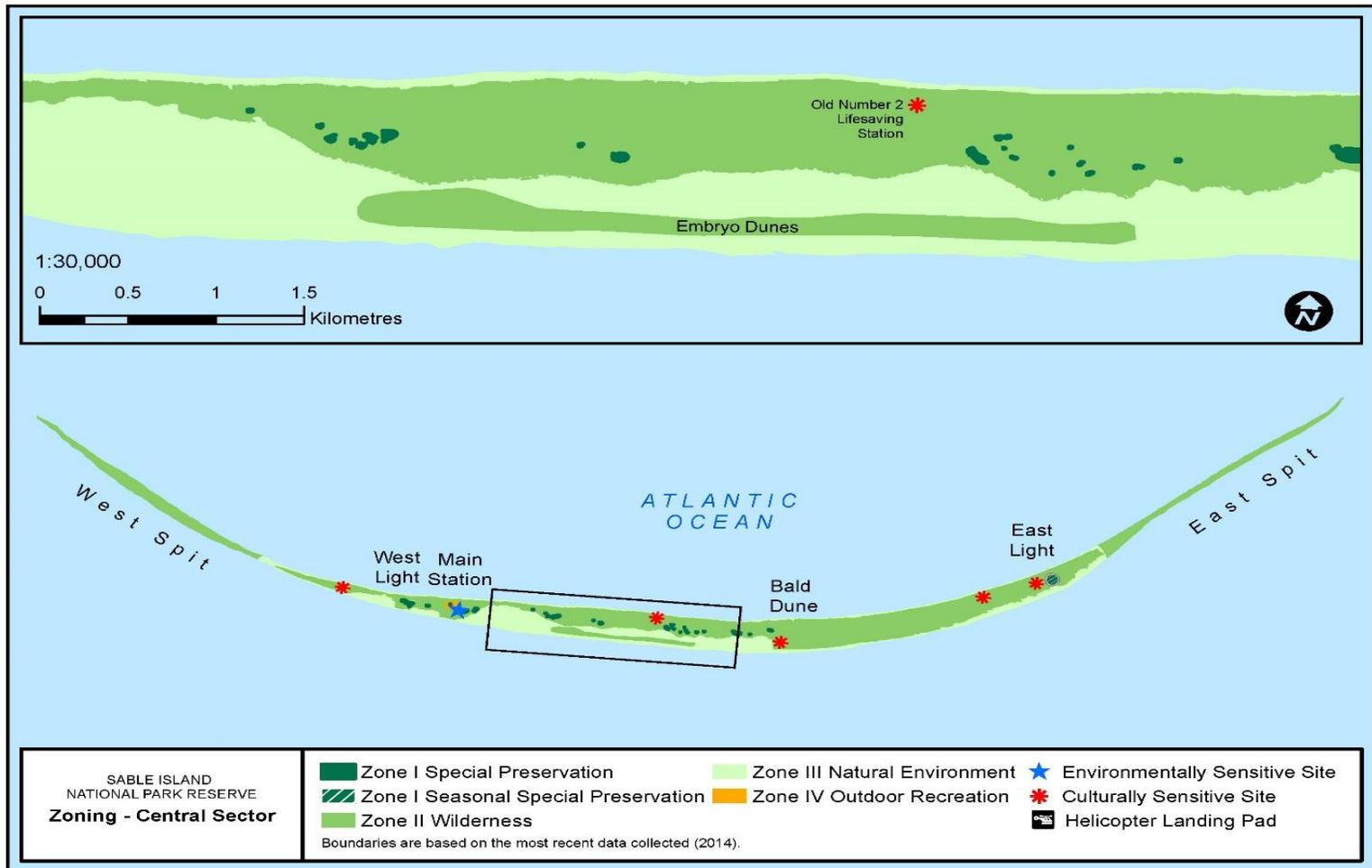
CSS5 Number 4 Lifesaving Station

While there does not appear to be any remnant structural evidence of the Number 4 station, there is clear evidence of the site location based on the presence of artifacts located in a sand “blowout.”

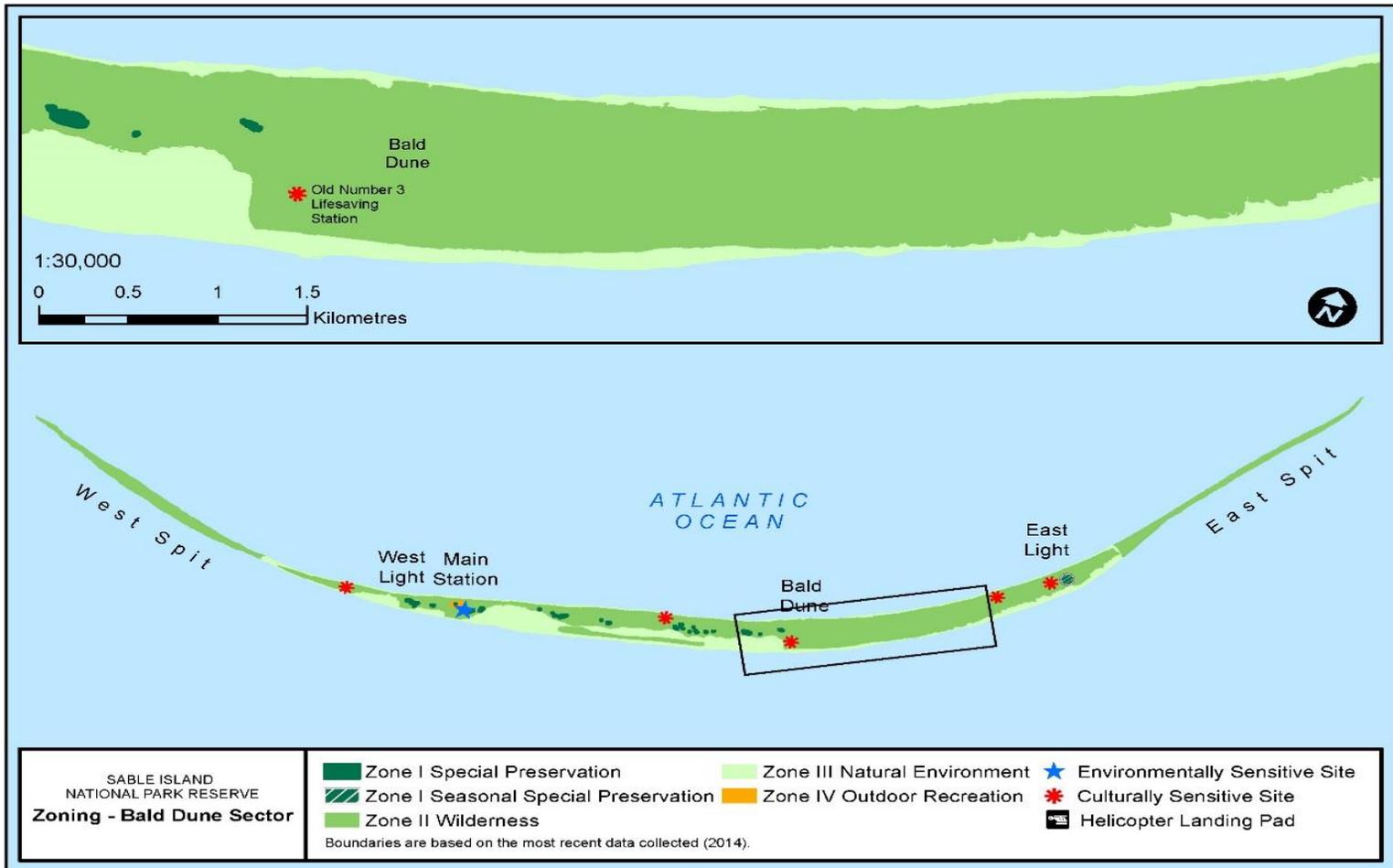
Map 2 Zoning: West Light Sector



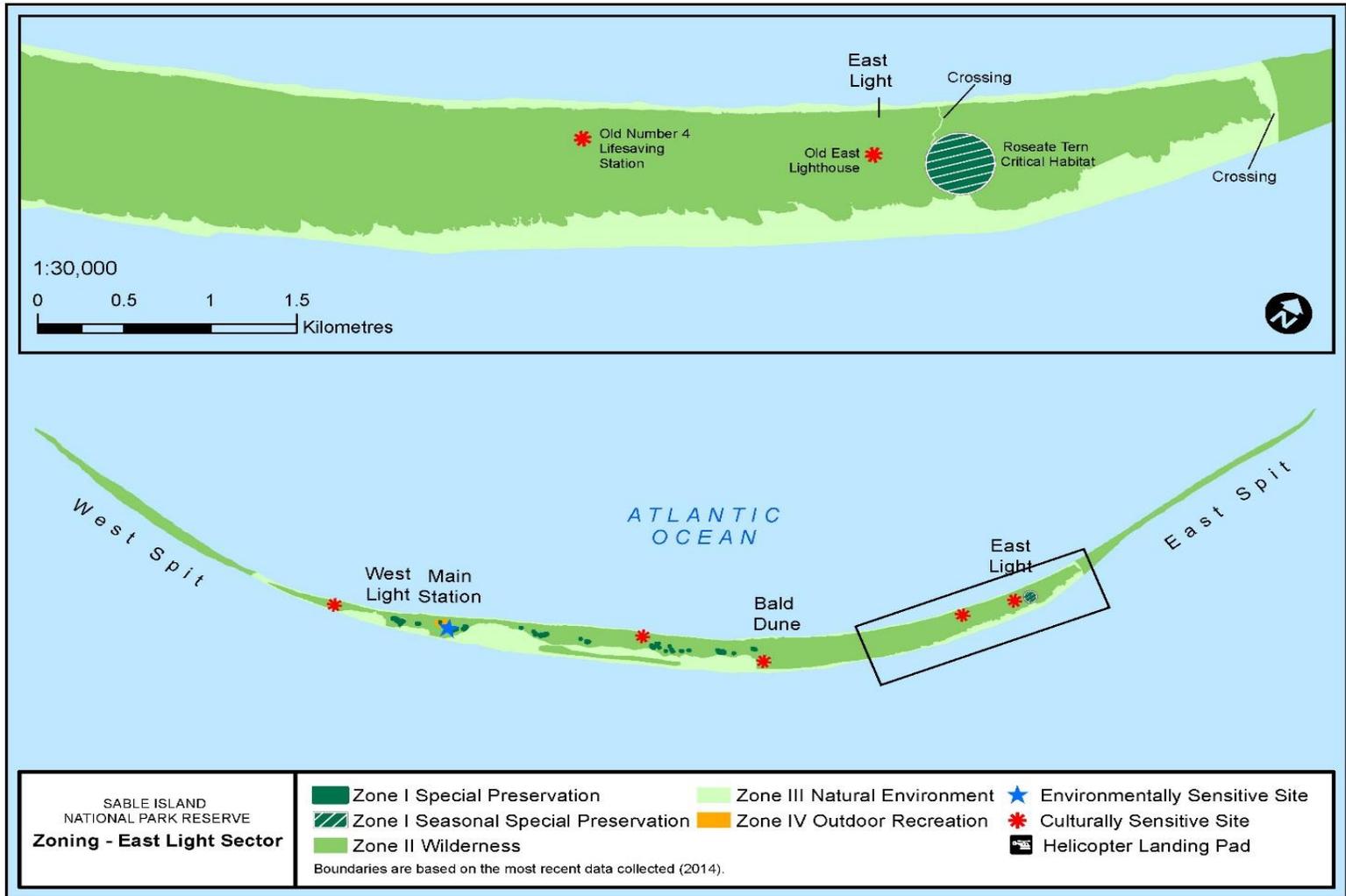
Map 3: Zoning: Central Sector



Map 4: Zoning: Bald Dune Sector



Map 5: Zoning: East Light Sector



8.0 Summary of Strategic Environmental Assessment

In accordance with *The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals (2010)*, a strategic environmental assessment (SEA) is conducted on all national park management plans. The purpose of a SEA is to incorporate environmental considerations into the development of public policies, plans, and program proposals to support environmentally-sound decision making. Individual projects undertaken to implement management statement objectives at the site will be evaluated to determine if an impact assessment is required under the *Canadian Environmental Assessment Act 2012*.

The scope of the SEA included the area within the boundary of Sable Island National Park Reserve, and considered influences from potential external, local, and regional stressors outside of the park, climate change, changes in visitation, and proposals in the management plan. The time frame considered in the assessment was ten years from the date of the plan, at which time the plan will be reviewed. Valued components evaluated in the SEA include: freshwater, horses, species at risk, groundwater, seabirds, grey seals, and coastal vegetation.

Sable Island is home to a unique herd of wild horses and a number of species at risk, including roseate tern, Ipswich sparrow and Sable Island sweat bee. Freshwater ponds are vital to maintaining these and other flora and fauna species on the island. Over the last century, dune-breaching and subsequent salt water intrusion have impacted freshwater water quality and pond surface area. The island remains very sensitive to climate change due to its relief, sand composition, wave exposure and projected sea level rise. The ecological integrity monitoring program is still in its infancy and further work needs to be undertaken to address information gaps.

To address these challenges, the management plan identifies objectives to understand environmental change in the park and adapt management practices to the evolving environment. This includes climate change research and planning, research and monitoring of ecological integrity measures to address knowledge gaps, recovery actions implemented for species at risk, reduction of the infrastructure footprint, waste management, management of visitation levels, and implementation of best management practices to reduce potential visitor impact. The plan also designates freshwater ponds, including a 5 metre buffer to protect sensitive pond edge vegetation, as Zone 1-Special Preservation. No further mitigations were identified through the SEA in addition to the management plan, existing management action and legislative requirements. Comments received by Indigenous partners, stakeholders and the general public were incorporated as appropriate into the SEA and the management plan.

The management plan supports the Federal Sustainable Development Strategies themes: Effective Action on Climate Change, Modern and Resilient Infrastructure, Healthy Coasts and Oceans, Pristine Lakes and Rivers, Sustainably Managed Lands and Forests, Healthy Wildlife Populations, and Connecting Canadians with Nature. There are no important negative environmental effects anticipated from implementation of the Sable Island National Park Reserve Management Plan.