

Sandy Lake Wilderness Area Management Plan

Draft Report



DRAFT

Prepared for:



Open Spaces, Community Services

Project Number EP-984

April 2025

Prepared by:



Edmonton, Alberta



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Sturgeon County

14 April 2025
File: EP-984

Dear Ms. Drabik,

Re: Sandy Lake Wilderness Area Management Plan, Draft Report

We are pleased to submit the above-noted report for your review. Thank you for your assistance to date. We look forward to receiving your comments.

Sincerely,

**Spencer Environmental
Management Services Ltd.**




Lynn Maslen, M.Sc., P.Biol
President

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1.0 INTRODUCTION

1.1 *Background*

Sandy Lake Wilderness Area (SLWA) is a uniquely sized and positioned, undeveloped, natural area located on the east shore of Sandy Lake (Figure 1) in Sturgeon County (the County). SLWA has remained undeveloped since it was acquired by the M.D. of Sturgeon in 1977 to serve as a natural area for outdoor recreation and education. Although SLWA has never been programmed for recreational purposes, it has always been available to the public for recreation and is a valued open space used mainly for nature appreciation and active outdoor pursuits. Recognized from the time of acquisition for its ecological significance, SLWA is an Environmental Preserve (zoned Environmental Protection). In 1989, SLWA was mapped as part of the Sandy Lake Southeast Shore Environmentally Sensitive Area (ESA) and ranked as regionally significant (InfoTech Services and Associates 1989). With County population growth, SLWA is now considered by the County to be underused. In 2016, the Sturgeon County's Open Spaces Plan (2016) identified the need for a long-term formalized management approach to land use in the SLWA. In 2021, the County identified a process to develop a management plan and retained Spencer Environmental Management Services Ltd. (Spencer Environmental), partnered with EDA (now Al-Terra), to prepare three documents to support future management of the SLWA: a biophysical assessment (BA) (completed in 2021); a recreational concept plan (completed in 2024) and this SLWA Management Plan.

1.2 *Management Vision*

This management plan is predicated on the following Sturgeon County management vision:

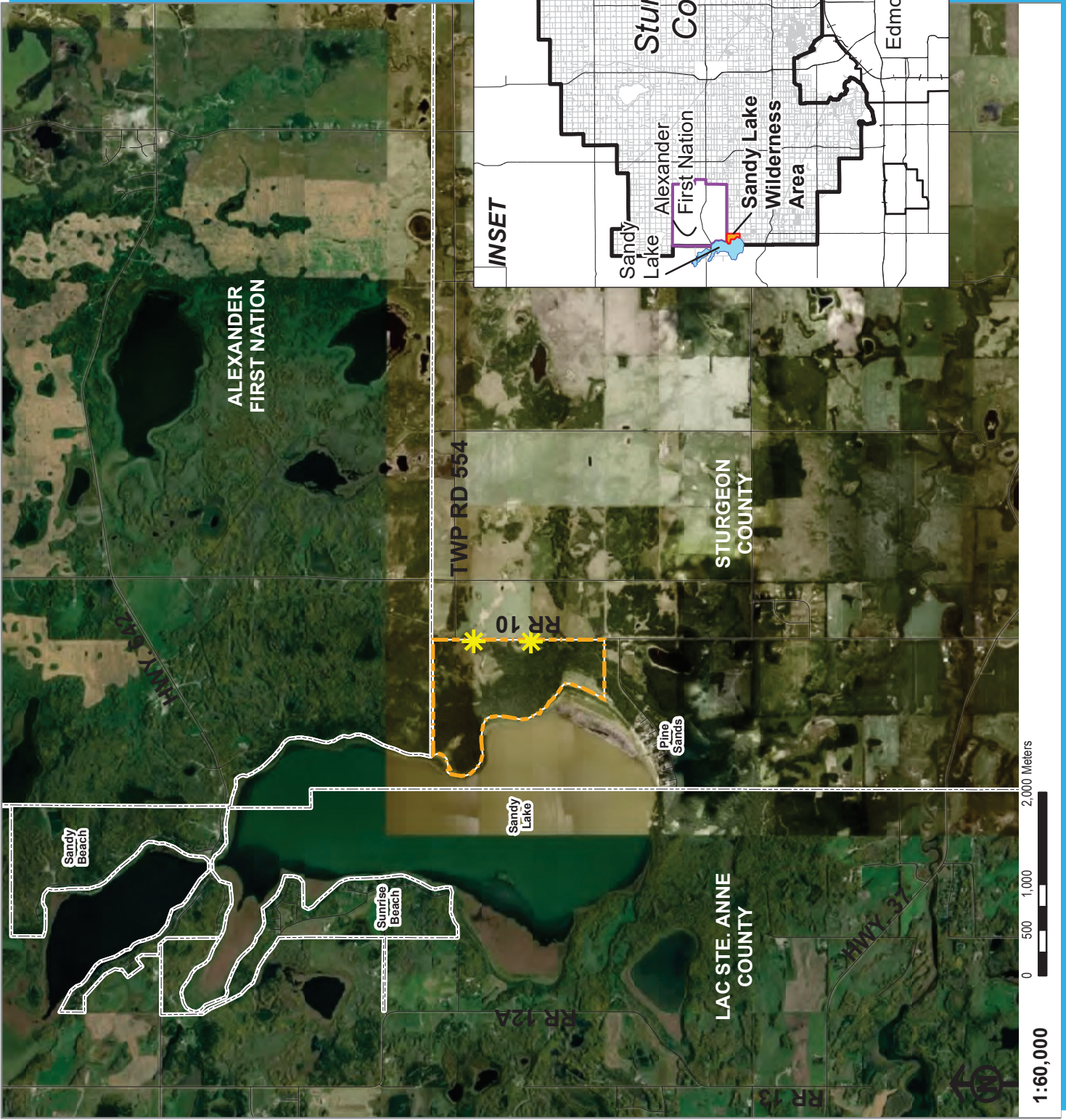
To ensure that the Sandy Lake Wilderness Area (SLWA) remains a sustainable, healthy Environmentally Significant Area that is available in perpetuity for appropriate recreational use by County residents.

1.3 *Site Description*




SLWA is a large (~170 hectare) parcel bounded by Range Road 10 on the east, privately held agricultural lands on the south, Sandy Lake on the west and Alexander First Nation Reserve Number 134, on the north (separated from the SLWA by an undeveloped government road allowance). It is located on the west boundary of Sturgeon County, approximately 30 km west of the town of Morinville.

SLWA is situated within the Dry Mixedwood natural subregion of the Boreal Forest (Spencer Environmental 2024). The natural area features undulating terrain with mixedwood forests, wetlands, and diverse habitats that support a rich wildlife community. A detailed description of SLWA and its history can be found in Sandy Lake Wilderness Area – Biophysical Assessment (Spencer Environmental 2021).

Figure 1.
SLWA Location
Sandy Lake
Wilderness Area
Management Plan



Legend

-  Sandy Lake Wilderness Area Boundary*
-  County Boundary
-  Signed Entrance

Map Date: 14 April 2025
 Imagery: ESRI Online (Date Not Known)



*Data provided by Sturgeon County (2021).

The relatively large area, relatively undisturbed contiguous forest communities, lakeside landscape position and low levels of public use render SLWA attractive to wildlife *and* to people seeking to enjoy an undeveloped environment. However, those same characteristics (secluded nature, abundant cover and connectivity to larger, adjacent habitat patches) combined with an ability to access unnoticed from adjacent unroaded parcels, means that the area has also faced pressures from unsanctioned uses such as illegal hunting and off-highway vehicle (OHV) activity, particularly in areas furthest from formal access points.

Historically, the SLWA has been lightly managed by the County. A limited trail network traverses much of the area, much of it originating from pre-County ownership, with some trails entering SLWA in non-sanctioned locations. Trails are not maintained and user discretion is advised. The SLWA operations and maintenance focus has been weed management of open areas, responding to issues stemming from unsanctioned use and access, refuse clean-up, and discouraging undesirable activities, largely through sign messaging. This management approach has facilitated retention of the area's "wilderness" character but has also led to localized environmental degradation.

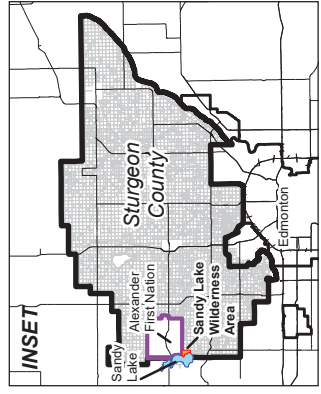
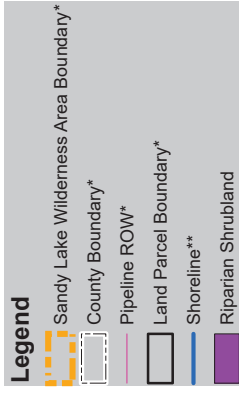
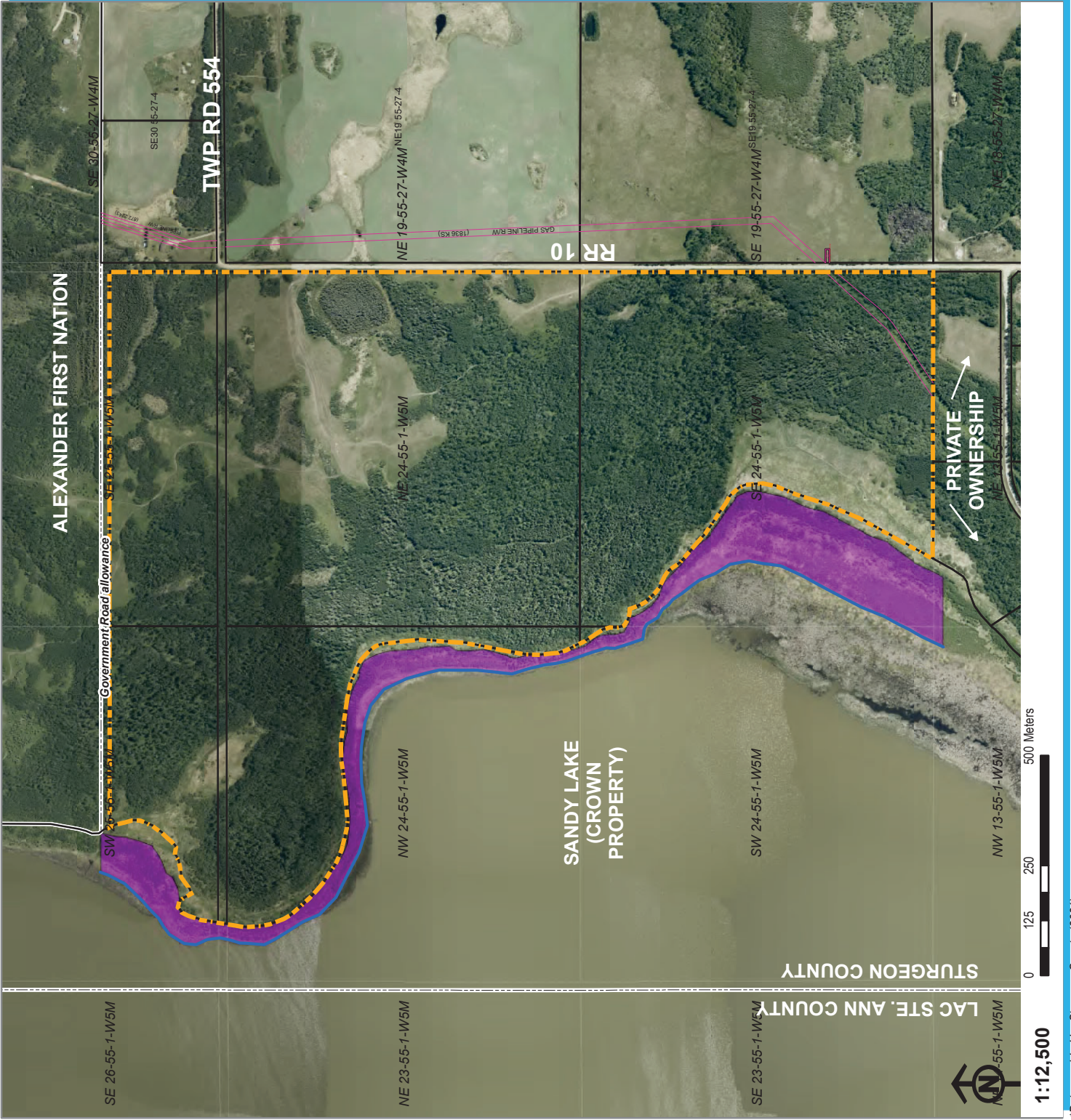
In a recent ESA inventory update, using contemporary standards and relying in part on a natural land cover database, SLWA was mapped as one component of the much larger ESA # 9 (comprising ~4434 ha) that crosses several jurisdictional boundaries (Spencer Environmental 2024) (see map in Appendix A). ESA #9 was ranked as a provincially significant area. The SLWA position near the centre of this larger ESA underlines the need for a management plan that guides the County in managing the portion of the ESA that is within their jurisdiction and facilitates working with neighbouring jurisdictions and owners toward sustainable management of SLWA and adjacent lands.

1.4 Land Ownership

SLWA is entirely owned and managed by Sturgeon County but does not exist in isolation and management must consider adjacent lands. The area's adjacency to other landowners and government jurisdictions is relevant to SLWA management. Sandy Lake, directly west, is owned by the Province of Alberta, lands to the south are privately owned, Range Road 10 on the east is a County road and lands to the north belong to Alexander First Nation (AFN) (Figure 2).

A review of available land titles indicates that the SLWA western boundary, as shown on Figure 2, is the surveyed bed and shore of the lake as determined in 1918. That boundary is unfenced and not otherwise visibly delineated in field. An existing trail closely follows much of the western boundary. In Alberta, lake shores or banks, as defined by the *Surveys Act*, shift location over time in response to gradual long-term changes in lake levels or sediment deposition and are typically manifested by associated vegetation changes. Since the 1918 survey, Sandy Lake waters have receded and, at least in some locations, the lake bank appears to have naturally and gradually shifted west (downslope). The exposed lands have transformed from an aquatic to a terrestrial environment, a process known as accretion. In Alberta, accreted lands silently become the property of the adjacent riparian

Figure 2.
Land Ownership
Context
Sandy Lake
Wilderness Area
Management Plan



Map Date: 14 April 2025
 Imagery: Sturgeon County (2021)



*Data provided by Sturgeon County (2021).
 **Shoreline is approximate and based on the point of transition between upland plant communities and emergent lake vegetation.

landowner. For this reason, it may be that the SLWA western boundary shown here is not current. Understanding the current location of the western SLWA boundary is relevant to the long-term management of SLWA, for several reasons: the County is responsible for management of accreted lands; any future SLWA trails or other recreational amenities should avoid encroachment on Crown lands but conditions on accreted lands may lend themselves to a future trail, or more likely, a viewing area, to be field fitted to conditions; if accreted lands are high and dry there is increased potential for unmanaged public access into SLWA; lands parallel to the lake bed and shore are important and sensitive wildlife habitat (Plate 1 and 2) and should be managed accordingly. All of those considerations point to a need for management practices that respect Crown lands, manage County lands and protect sensitive shoreline ecosystems. The County could formally explore land accretion with the Province to clarify the current boundary and ensure lands are managed appropriately. The area of accreted lands may be significant, possibly summing to ~ 20 ha.



Plate 1. Shoreline habitat along SLWA west boundary.



Plate 2. Riparian emergent vegetation along SLWA west boundary.

The north SLWA boundary shared with the AFN represents an opportunity for future management collaboration, which the County continues to explore. The south boundary shared with private landowner(s) represents an opportunity for discussions regarding fencing and access control.

2.0 MANAGEMENT PLAN METHODS

2.1 *Supporting Process*

This plan was developed by Spencer Environmental, in collaboration with Sturgeon County representatives. Following completion of the draft BA, preparatory to and in parallel with development of a draft Concept Plan, the County designed and executed community consultation and communication plans, which culminated in 2024. Consultation results informed the final Concept Plan approach and the approach to be taken by this management plan. The Concept Plan, Conservation Approach, was finalised in December 2024, enabling the management plan to advance.

2.2 *Guiding Principles*

Concept Plan and Management Plan development began with establishment of clear guiding principles intended to realize the County's vision statement. The plan was founded on the following set of guiding principles that were informed by ecological principles, County regulations and bylaws for Environmental Protection lands, the SLWA What We Heard Report (2021 and 2024). Those principles are as follows:

- protect, reclaim, and enhance Sandy Lake Wilderness Area significant features
- provide passive recreational activities centered on trail experiences, utilizing and improving existing trails where possible
- provide comprehensive guidelines for acceptable uses/activities and permitted development within SLWA
- minimize capital, operational, and maintenance funding requirements
- partner with local organization(s) to assist in site management and reclamation

The County's consistent intention was to enhance ecological protection and the public experience while fostering collaborative management partnerships with groups such as local First Nations communities and non-governmental organizations (NGOs) having aligned goals. The final SLWA Concept Plan – Conservation Approach (2024) (Appendix B) reflects those principles.

This management plan also builds on conclusions from the 2021 Biophysical Assessment (Spencer Environmental 2021), all of them consistent with the guiding principles. The BA documented the SLWA's landscape level importance and highlighted its ecological value related to its lakeshore position, diverse habitat types, and intact riparian forests. The following recommendations from the BA were foundational to this management plan:

- use existing trails for formalized development and focus new infrastructure in previously disturbed grassland areas
- preserve interior forest and wetland ecosystems, ensuring any required trails are designed to minimize ecological damage
- implement measures to restrict undesirable uses, such as OHV access, while promoting stewardship and education about the SLWA's significance

2.3 Management Plan Development

SLWA Management Plan content was developed through consideration of the final Concept Plan for the site, known resources and conditions within and adjacent to SLWA, identified threats or possible threats to site resources and examination of existing management plans for natural areas in other jurisdictions of similar size or having similar resources.

The SLWA Management Plan adopts a hierarchical management framework (Plate 3) consisting of:

- ❖ Management Goal: the broad, long-term desired outcome
- ❖ Management Objectives: measurable outcomes that support achievement of the management goal; objectives describe desired future conditions
- ❖ Management Strategies: short-term or long-term approaches or actions that, if adopted, will realize identified management objectives



Plate 3: Management Plan Hierarchical Structure

All of the developed management objectives and strategies are intended to promote management that is compatible with SLWA natural processes.

3.0 ECOLOGICAL CONTEXT

SWLA is a biologically rich and diverse area, characterized by a mosaic of both forested and non-forested plant communities, with forest dominant. The deciduous and mixedwood upland forests are generally intact and comprise trees of varying ages and sizes, contributing to the structural complexity of these communities. Lowland forests in the SLWA, particularly the peatland-forming communities, are regionally uncommon and provide habitat for a diversity of peatland-adapted species. Forests in the SLWA are interspersed with open areas, such as riparian meadows and shrublands, which support a wide range of herbaceous species that enhance the ecological value of the site. The SLWA is also home to a diverse collection of wetlands, including marshes, swamps, and peatlands, each with distinct hydrological regimes and plant communities. Wetlands are most abundant in the northern part of the area, and are generally small, with individual wetlands ranging in size from 0.02 ha to 5.3 ha. These wetlands serve vital ecological functions such as water filtration, flood control, and supporting biodiversity. The significant riparian lakeshore area along Sandy Lake contributes to the area's ecological richness, with plant communities adapted to short-term fluctuating water levels, further bolstering the diversity of habitats within the site. Table 1 provides a means of appreciating the vegetation/habitat mosaic present at SLWA.

Table 1. SLWA plant community types, aggregate area, and proportion of SLWA

Plant Community	Aggregate Area* (ha)	Proportion of Total Site Area (% of 169.9 ha)
<i>Upland Plant Communities</i>		
Forest – Deciduous Dominant	101	59%
Forest – Mixedwood	27	16%
Open Shrubland	6	4%
Hayed Grassland	14	8%
Riparian Shrubland	1	1%
Riparian Meadow	5	3%
<i>Wetland Plant Communities</i>		
Marsh Wetlands	8	5%
Swamp Wetlands	5	3%
Peatlands	3	2%

*rounded numbers

The rolling topography of the natural area adds ecological diversity, creating varied microhabitats that support a diversity of species. This variability in landscape features enhances the overall ecological complexity of the area, providing a range of conditions for varied plant communities. Appendix C provides some photographic site representations.

SLWA also plays a crucial regional role in maintaining connectivity and habitat availability for wildlife. The shoreline and riparian zones along Sandy Lake, both within and adjacent to SLWA, not only support local species but also serve as an integral part of a larger north-south wildlife corridor that facilitates migration and dispersal across the region. This corridor is especially important for larger mammal species that require expansive home

ranges and dispersal routes, such as wolves, lynx, cougar, and black bears. SLWA and the larger ESA #9 also function as a refuge for species of management concern. SLWA adjacency to Sandy Lake contributes to the quality of vital stopover habitat for special-status migratory birds, such as whooping crane and Hudsonian godwit, which have been observed in the region.

4.0 HUMAN CONTEXT

4.1 *Historical Use*

A full account of historical land use of this parcel was beyond the scope of this management plan; however, three known aspects of historical human use are relevant to the plan.

- Prior to 1977, SLWA lands were privately owned and at times supported cattle grazing (Randall Conrad and Associates 1987). That prior land use played a role in trail development on the parcel. The existing unmaintained trails are therefore not necessarily optimally located for recreational use.
- Throughout this project, the County has acknowledged that other stakeholders, such as members of the Alexander First Nation, may hold valuable knowledge regarding earlier historical or cultural uses of the SLWA lands. The County continues to consult with AFN regarding their interest in the lands.
- BA preparation included desktop investigation of GoA archaeological historic resources (explicitly acknowledging that the scope of work did not include gathering cultural or historical knowledge from other stakeholders) and topographic analysis (Circle CRM 2021). Those investigations found that SLWA does not overlap with lands assigned a Historic Resource Value and no Historical Resources Impact Assessments (HRIA) have been conducted for this area. The study revealed the presence of potentially distinct and/or elevated landforms often associated with significant historical resources. On that basis, it was recommended that an HRIA be undertaken prior to development activities to ensure compliance with the Alberta *Historical Resources Act*.

4.2 *Existing Uses*

4.2.1 *Sanctioned Access and SLWA Uses*

Currently, the SLWA features multiple access points that enable public entry at each of four margins. On the east, two signed, formal entrances provide access from Range Road 10 into grassed areas that are used informally for parking. From these locations, OHVs are able to enter and navigate a network of trails cutting through forested areas. On the north and south, informal entrances are present, where trails on adjacent properties have extended into SLWA. Finally, on the west margin, it is possible to access SLWA by beaching watercraft on the lake shore. At present, there are no facilities supporting this and there are no records describing how often, if at all, this occurs.

Three-strand barbed wire fencing currently runs continuously along the east boundary of the SLWA, parallel to Range Road 10, with a primary purpose of access management. Barbed wire fencing also exists in short discontinuous sections along the north and south SLWA boundary. That fencing is largely unmaintained and appears to be a vestige of former land uses. To some degree, it still serves to delineate SLWA boundaries and may possibly aid in the management of unauthorized activities.

The current promoted recreational uses in the SLWA include non-motorized recreational activities such as hiking/walking, birdwatching, and general nature appreciation. Prohibited activities include fires, shooting/hunting, dumping/littering, OHV use, and tree removal. Despite these prohibitions, evidence of unauthorized hunting, camping, illegal fires, and other undesirable activities has been observed regularly in the area.

One underground utility ROW traverses the SLWA, crossing in the extreme southeast quadrant (Figure 2). The ROW contains high- and low- pressure gas pipelines, and communication cables.

4.2.2 *Impacts of Current Use*

Human activities in the SLWA appear to have changed little since initial studies in 1987 recognized that recreational use was informal and largely unmanaged and noted that OHVs frequently traversed well-established trails (Randall Conrad and Associates 1987). Years of OHV use, particularly in open patches and riparian areas, has created significant ruts within upland and wetland plant communities that cause visible, local soil erosion and compaction and vegetation damage. In 1987, soil compaction resulting from cattle grazing was also noted (Conrad and Associates, 1987). This grazing likely contributed to the current presence of weed and exotic species in open areas. Localized vegetation and soil damage is also present as a result of unauthorized camping and other gatherings. These areas are regularly cleaned up by the County; however, vestiges of that use (e.g., refuse and disturbed soils) remain. Hunting and target shooting has led to shotgun shells scattered throughout the area. There is at least one discarded vehicle present in the natural area. Trail creation appears to have been opportunistic to suit the land uses of the day, including trespass activities such that the existing trail network is not planned and not necessarily conducive to the SLWA guiding principles. These impacts underscore the area's vulnerability to unmanaged use; however, all noted impacts are considered to be reversible.

4.3 *Proposed Public Use: The Concept Plan - Conservation Approach*

The final SLWA Concept Plan (presented in full in Appendix B) represents a balanced approach to foster responsible development that accommodates human use while prioritizing ecological sustainability. This approach aims to conserve SLWA's natural features—including vegetation, wildlife habitats, hydrology, and water resources—by defining development boundaries and outlining protection measures for sensitive areas to minimize human impact. This management plan will facilitate management of the area during and after concept plan implementation.

4.3.1 *Concept Plan Programming*

Future public use of the SLWA will focus on passive, nature-based recreation that aligns with achieving ecological sustainability and responsible environmental stewardship. The primary uses will include hiking, wildlife viewing, and educational activities, all of which will emphasize low-impact interaction with the natural landscape. Additionally, harvesting native fruits and nuts will be permitted. Visitors will be encouraged to explore the area via designated trails, with opportunities for observation at viewpoints and resting areas. The plan will promote responsible recreation through the use of well-marked trails, educational signage, and areas for controlled gatherings, such as picnic spaces with fire boxes. By limiting motorized vehicle access and focusing on sustainable human activities, the aim is to create an environment where visitors can enjoy the natural beauty of the area while minimizing their ecological footprint.

4.3.2 *Concept Plan Amenities/ Infrastructure*

The final Concept Plan includes a list of recommended amenities. Several elements are highlighted here:

- one designated, developed parking area to manage vehicles and reduce vehicle access into sensitive zones, minimizing habitat disturbance
- an upgraded single use trail system with color-coded markers, strategic trail improvements and segment decommissioning, and resting areas with benches, to facilitate a safer and more accessible recreational experience
- boardwalks at sensitive wetland areas will ensure protection of wetland ecosystems while providing visitors with the opportunity to view wetland features
- a high-point lookout offering unobstructed views of Sandy Lake, to allow visitors to experience panoramic landscapes without entering sensitive areas
- strategically placed animal-resistant waste receptacles to encourage responsible waste management while reducing potential for human-wildlife conflict
- culturally informed, educational and interpretive signage to deepen visitors' understanding of the site's cultural, ecological, and historical significance

4.3.3 *Use Restrictions*

To protect the natural integrity of the SLWA and ensure its long-term ecological health, several existing restrictions will continue and in a reinforced manner. Motorized vehicle access will be limited to designated parking areas, with further control over OHV entry at area boundaries through selective placing of boulders designed to restrict vehicle access while facilitating safe wildlife movement. Prohibition of hunting and camping will continue. Off-trail activities will be discouraged. Segments of existing unmaintained trails not incorporated into the designated trail network (Appendix B), will be decommissioned and reclaimed and trailheads rendered impassable to vehicles. Certain sensitive areas, such

as peatlands, wetlands, and riparian zones, will be off-limits to all but the most controlled forms of recreation, such as boardwalk access. These measures, alongside the installation of signs and visitor guidelines, will ensure that human presence remains respectful of the site's ecological needs and that the wilderness area is conserved for future generations.

4.3.4 Future SLWA Opportunities/Considerations

It is understood that over time the County will review allowable uses in the SLWA in response to site conditions, policy of the day, and stakeholder and public engagement input received since adoption of this management plan.

To accommodate a future need for a second SLWA vehicle access, SLWA reforestation/reclamation plans should accommodate at least one potential location on Range Road 10. The Concept Plan already future proofs for this by avoiding development in lands further south of the proposed parking area.

Potential SLWA future uses may include managed equestrian use. The addition of equestrian use would be actively considered as a result of demand and support identified through future public engagement and would be conditional on identification of a suitable County partner to assist with associated operations and maintenance. Future equestrian use would require either trail and infrastructure enhancements that acknowledged a revised, dual use trail system for both pedestrian and equestrian users or trail redesign to accommodate new trail(s) dedicated to equestrian use. Either approach would require consideration for new signage, new or upgraded/realigned trails or trail sections and the redesign of a parking/staging area that accommodates horse trailers and hitching areas.

Once the final Concept Plan approach was identified, the County began actively contemplating approaches to reclamation/remediation of disturbed lands within SLWA. They have initiated discussions regarding reforestation of select locations with a non-government organization specializing in that practice and with established partnerships with a wide range of sponsors. The intention is to focus on trails and open areas redundant to the Concept Plan and to reforest using tree and shrub species native to the region, including species traditionally used by Indigenous groups for medicinal and harvest purposes. The first step would be preparation of a planting plan.

5.0 INFLUENCING LEGISLATION

Although SLWA is municipally owned, certain pieces of provincial and federal legislation are applicable to site resources and therefore site management. The absence of regulated watercourses and fish bearing water bodies in the SLWA reduces the environmental approvals that could be triggered by any proposed works or activities, however adjacency to fish-bearing Sandy Lake will require care during near water activities that create potential for erosion and sedimentation and any work below the ordinary high water mark, as defined by the federal government, should be assessed for compliance with the *Fisheries Act*. Table 2 describes legislation having potential to influence site management, including Acts and regulations requiring approvals and those not requiring approvals but prohibiting harm to prescribed resources.

Table 2. Summary of Potentially Applicable Legislation.

Legislation, Bylaw or Policy	Regulatory Agency	Authorization/ Approval/Permit Required
Provincial		
<i>Water Act and Wetland Policy</i>	Alberta Environment and Protected Areas	In general, an approval is required for all activities that may impact water and the aquatic environment, including disturbing wetlands. For trails in wetlands, authorizations pursuant to the <i>Water Act</i> will likely be required.
<i>Public Lands Act</i>	Alberta Forestry and Parks	This <i>Act</i> invests the province with ownership of the bed and shore of all bodies of water that are permanent and naturally occurring and requires work within the bed and shore of a crown-claimed wetland to have a <i>Public Lands Act</i> authorization. The Crown owns the bed and shore of Sandy Lake. To date there is no evidence that the Crown would claim any of the wetlands in the SLWA.
<i>Wildlife Act</i>	Alberta Environment and Protected Areas	There are no permitting triggers; however, the <i>Act</i> prohibits disturbing the house, nest or den of prescribed wildlife such as northern flying squirrels and owls. Any clearing activity requires either avoiding vegetation removal in the breeding season (20 February to 20 August) or undertaking a nest search before vegetation removal.
<i>Historical Resources Act</i>	Alberta Culture and Status of Women	All projects involving ground disturbance have potential to disturb historical, archaeological and paleontological resources. For the areas identified as having high archaeological potential, a Historical Resources Impact Assessment should be conducted prior to ground disturbance in those areas to remain compliant with the <i>Alberta Historical Resources Act</i> .
<i>Weed Control Act</i>	Alberta Agriculture and Irrigation	This Act regulates designated weed species and weed seeds in the province through various control and enforcement measures.

Legislation, Bylaw or Policy	Regulatory Agency	Authorization/ Approval/Permit Required
Federal		
<i>Migratory Birds Convention Act</i>	Environment and Climate Change Canada	There are no permitting triggers; however, violation of the <i>MBCA</i> can result in penalties. In the case of this project, future construction activities must be planned to avoid impacts to active nests of prescribed bird species and to unoccupied nests of select prescribed species (20 April to 20 August).
<i>Species At Risk Act (SARA)</i>	Environment and Climate Change Canada	On non-federal lands, the <i>Act</i> applies only to disturbance of listed endangered, threatened or extirpated <i>aquatic species</i> and <i>migratory birds</i> .
<i>Fisheries Act</i>	Fisheries and Oceans Canada	This <i>Act</i> aims to regulate and protect fisheries and prevent pollution. Section 36 prohibits deposit of deleterious substances to water frequented by fish. Section 36 may apply to trail/viewpoint work occurring near Sandy Lake and should be considered during trail location, design ad construction.

6.0 NATURAL AREA MANAGEMENT

6.1 SLWA Management Goal

Considering the above information and context, it is clear that management of SLWA should respect the area’s most sensitive features and prioritize conservation but also provide for some recreational use, sensitively integrating people into the area. This approach will sustain the area’s special features while allowing people to lightly use the area while appreciating the site’s ecosystems and the services they provide. To that end, this plan has been prepared to achieve the following management goal for SLWA:

To preserve the biodiversity and ecological integrity of the Sandy Lake Wilderness Area, with particular emphasis on protecting the intact riparian forest and shorelines, while supporting low-impact, nature-based recreational activities that foster public stewardship and appreciation of the area’s natural features and resources.

6.2 SLWA Management Objectives

Tables 3 and 4 present a comprehensive list of SLWA management objectives, organized by resource type and activity type, respectively.

Table 3. SLWA Management Objectives by Resource Type.

Resource	Objectives
Soils	<ul style="list-style-type: none"> ▪ Maintain or improve existing soil conditions in the SLWA. Soils are integral components of the plant communities and foundational to SLWA ecological function. ▪ In areas to be reforested or otherwise reclaimed, improve soils as required.
Hydrology	<ul style="list-style-type: none"> ▪ Maintain existing surface water quality and drainage patterns within the SLWA. ▪ Avoid direct and indirect impacts to adjacent Sandy Lake. ▪ Ensure amenities are designed to suit groundwater conditions.
Vegetation, Including Wetlands	<ul style="list-style-type: none"> ▪ Maintain healthy, rich, and diverse wetland and upland plant communities within the SLWA. ▪ Protect rare and uncommon plant species. ▪ Manage invasive, weedy and exotic (non-native) plant species to minimize the spread of existing undesirable species and prevent establishment of others. ▪ Reclaim disturbed habitat, including pipeline ROW and existing trails not included in the Concept Plan. ▪ Pursue reforestation of existing trails and open areas that are excess to lands needed to implement the Concept Plan.
Wildlife and Wildlife Habitat	<ul style="list-style-type: none"> ▪ Maintain existing complex vertical and horizontal structure (e.g. shrubs, snags, woody debris) of habitat in the SLWA, as it provides valuable, high-quality wildlife habitat. ▪ Avoid causing wildlife mortality and disturbance.

Resource	Objectives
	<ul style="list-style-type: none"> ▪ Maintain wildlife movement corridors that promote ecological connectivity to adjacent lands.

Table 4. SLWA Management Objectives by Activity.

Use	Objective
Human Use and Safety	<ul style="list-style-type: none"> ▪ Provide recreational amenities as described in the Concept Plan ▪ Control off-trail and unauthorized use of the area; discourage establishment of informal trails. ▪ Maintain a litter-free site. ▪ Identify safety risks, and then minimize, control and mitigate safety hazards to SLWA visitors. ▪ Allow for harvesting of edible and medicinal plants, in a controlled manner.
Education Initiatives	<ul style="list-style-type: none"> ▪ Educate the public on the historic cultural use of the site by Indigenous peoples, the ecosystem services provided by SLWA, and importance of the site to local and regional wildlife populations.
Construction Within and Adjacent SLWA	<ul style="list-style-type: none"> ▪ During construction activities, avoid direct and indirect negative impacts to surrounding biophysical resources within SLWA. ▪ Avoid impacts to cultural and historical resources with SLWA.

6.3 SLWA Management Strategies

This section presents management strategies organized by the objectives presented in Section 6.2. Strategies are presented as short-term or long-term, as relative terms. All long-term strategies could be adopted as short-term if the need or means become apparent in the near future. There is some overlap between resource strategies as would be expected when managing ecosystems.

6.3.1 Soils

Soils Objective 1: Maintain or improve existing soil conditions in SLWA. Soils are integral components of the plant communities and foundational to SLWA ecological function.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> ▪ Install boardwalks where trails intersect areas with soils susceptible to compaction or erosion, for example through wetlands.
<i>Long-term strategies:</i>
<ul style="list-style-type: none"> ▪ On an annual basis, visually assess trails and adjacent lands for signs of soil compaction and erosion. If observed, take immediate remedial action to address issues before they compound.

Soils Objective 2: In areas to be reforested or otherwise reclaimed, improve soils as required.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> ▪ Assess all potential restoration sites and added soil to areas showing evidence of soil compaction or erosion.
<i>Long-term strategies:</i>
<ul style="list-style-type: none"> ▪ Re-assess soils in areas where reclamation/reforestation is not successful and address as necessary.

6.3.2 Hydrology

Hydrology Objective 1: Maintain existing surface water quality and drainage patterns within SLWA.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> • Do not use de-icing agents on SLWA trails or parking areas. • Where trails intersect wetland habitat, install boardwalks to limit impacts to surface runoff patterns.
<i>Long-term strategies:</i>
<ul style="list-style-type: none"> • None at present

Hydrology Objective 2: Avoid direct and indirect impacts to adjacent Sandy Lake.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> • Retain a surveyor to establish the current bed and shore of Sandy Lake. A vegetation expert should accompany the surveyor to ensure the bed and shore are accurately delineated. • Engage with the Province to discuss formal transfer of accreted lands to the County. • Ensure that new trails are located on County lands, not Crown lands, i.e., the bed and shore of Sandy Lake. • Ensure that trail and other amenity construction does not affect Sandy Lake water quality.

<i>Long-term strategies:</i>
<ul style="list-style-type: none"> • None at present

Hydrology Objective 3: Ensure amenities are designed to suit groundwater conditions.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> • For amenity construction near Sandy Lake, or at/near wetlands, assess groundwater levels and design accordingly.
<i>Long-term strategies:</i>
<ul style="list-style-type: none"> • None at present

6.3.3 Vegetation, Including Wetlands

Vegetation Objective 1: Maintain healthy, rich, and diverse wetland and upland plant communities within SLWA.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> • Leave downed woody debris in place as it contributes to nutrient cycling and vegetation establishment, unless fuel loads are deemed a fire safety hazard. • Post signage advising users to remain on trails to protect sensitive vegetation and discourage plant collection. • Minimize clearing and pruning associated with trail maintenance.
<i>Long-term strategies:</i>
<ul style="list-style-type: none"> • Leave dead standing trees (snags) in place unless they represent a hazard to the public. Snags provide important ecosystem functions (i.e., habitat for wildlife, nutrient cycling, and thermal cover). • Review fuel loads in conifer stands regularly and reduce as needed as per the Fire Marshall. • Allow wetland vegetation composition to change over time in response to weather and climate changes.

Vegetation Objective 2: Protect rare and uncommon plant species.

<i>Short-term strategies:</i>
<ul style="list-style-type: none"> • Undertake rare plant surveys of the areas to be affected by the Concept Plan implementation and develop rare plant protection measures as needed.

<i>Long-term strategies:</i>
<ul style="list-style-type: none"> • Partner with local conservation/stewardship agencies to undertake rare plant surveys of the remainder of SLWA and prepare educational materials.

Vegetation Objective 3: Manage invasive, weedy and exotic (non-native) plant species to minimize the spread of existing undesirable species and prevent establishment of others.

<i>Short and long-term strategies</i>
<ul style="list-style-type: none"> • Undertake a targeted weed survey to document and map concentrations of noxious weeds and undesirable exotic species within the SLWA. • Focus on areas that have already been disturbed and that are thought to support the highest densities of weeds and then eradicate existing weedy species. • Manage noxious and prohibited noxious weeds using the County’s Vegetation Management Standards Policy, tailored to SLWA conditions. Use chemical treatment as a last resort only. • In addition, upon observation, remove prohibited noxious weeds, using proven effective methods specific to the species present, within seven days.

Vegetation Objective 4: Reclaim all disturbed areas to a native plant community.

<i>Short and long-term strategies</i>
<ul style="list-style-type: none"> • Clear litter from disturbances. • Remove contaminated soils. • Seed and or plant with species native to SLWA using native plant species or propagules that are locally sourced (within 150 km) and already present in the SLWA. For areas rutted from OHV use, fill ruts with topsoil prior to planting. • Replant other disturbed lands that are sparsely vegetated and would benefit from infill planting.

Vegetation Objective 5: Pursue reforestation of existing trails and open areas that are excess to lands needed to implement the Concept Plan.

<i>Short-term strategies:</i>

- Partner with one or more NGOs whose goals align with the County, to reforest redundant trails and disturbed open grassy areas using native tree and shrub species.
- Select tree species that are already present in the SLWA and able to thrive in the moisture and light conditions of the area.
- Collaborate with AFN stakeholders regarding species selection.
- Assess identified potential reforestation areas and prepare a reclamation and planting plan. Refine the Concept Plan as required to ensure plan compatibility.
- Implement measures to dissuade the public from accessing reforested areas. This includes mounding soils, felling trees, and/or strategically placing boulders at ingress locations to linear reforestation areas.

Long-term strategies:

- In partnership with the NGO, monitor plant establishment and health in reforested areas for up to 5 years and implement remedial measures as required.

6.3.4 Wildlife and Wildlife Habitat

Wildlife Objective 1: Maintain existing complex vertical and horizontal structure (e.g. shrubs, snags, woody debris) of habitat in SLWA, as it provides valuable, high-quality wildlife habitat.

Short-term strategies:

- Where snags are a safety hazard, cut tree to a height that is equivalent to the distance of the snag from the area of concern (i.e., trail or forest edge) to create a habitat tree. Leave tops of cut trees in the SLWA to function as deadwood.
- When replanting disturbed areas, use native species only.
- Lights on facilities adjacent the SLWA should be dark sky compliant to avoid light trespass into the SLWA and associated negative impacts to wildlife behaviour and physiology.
- Prior to shoreline trail/ viewpoint design, survey shoreline for sensitive species that would benefit from avoidance buffers and incorporate data into trail planning.
- Prior to upland trail improvement, survey affected lands for sensitive species stick nests and incorporate data into trail alignment.

Long-term strategies:

- Partner with local conservation stewardship agencies to develop and implement monitoring programs for populations of species of conservation concern in the SLWA.
- Develop site-specific management plans for special status species that use SLWA for at least a portion of their lifecycle.

Wildlife Objective 2: Avoid causing wildlife mortality and disturbance.

Short-term strategies:

- Designate the SLWA as on-leash only area. Install signage at SLWA trailheads to promote compliance.
- Provide dog waste bags at the parking area.
- Perform active vegetation management outside of the principal migratory breeding bird season and owl breeding season (i.e., manage vegetation between August 20 and February 20), to the greatest degree possible. Where not possible, conduct a nest sweep prior to any work.
- Install signage describing appropriate wildlife-human encounter protocols and behaviour.
- Post appropriate wildlife-human encounter protocols and behaviour on County SLWA webpage.

Long-term strategies:

- Consult with managers of pipeline ROW to ensure that vegetation management is compatible with SLWA wildlife management objectives.
- Maintain links to provincial and municipal sanctioned wildlife-property conflict prevention and resolution protocols on the County website.

Wildlife Objective 3: Maintain wildlife movement corridors that promote ecological connectivity to adjacent lands.

Short-term strategies

- Remove existing barbed wire fencing along the north and south SLWA boundaries.
- Consult with adjacent landowners regarding fencing needs and ensure that any fencing required is permeable to all wildlife.

Long-term strategies

- Remove existing barbed wire fencing along the east SLWA boundaries and install fencing that is permeable to wildlife movement while preventing OHV access.

6.3.5 Human Use and Safety

Human Use Objective 1: Provide recreational amenities as described in the Concept Plan

<i>Short-term strategies</i>
<ul style="list-style-type: none"> • Develop one designated parking area with toilet facilities; create designated picnic and gathering areas that include fire boxes; install stone trail markers to delineate the formal trail network; upgrade trails as needed, including installing indicated boardwalks, install benches and viewpoints at strategic locations along trails, including one viewpoint at Sandy Lake shore.
<i>Long-term strategies</i>
<ul style="list-style-type: none"> • Lightly manage vegetation at viewpoints as needed to maintain views. • Develop a high-point look-out in northeast quadrant

Human Use Objective 2: Control and monitor off-trail and unauthorized use of the area; discourage establishment of informal trails.

<i>Short-term strategies</i>
<ul style="list-style-type: none"> • At trailheads, install signs that describe the value of the area, guidelines for visitors' use, and reasons to remain on established trails. • Install signage at established non-sanctioned ingress locations indicating no trail access. • Install soil mounds, felled trees, and/or strategically placed boulders at termini of trails to be decommissioned. Refer also to strategies for vegetation objectives # 4. • Install physical barriers, such as boulders, as per Concept Plan, at established non-sanctioned ingress locations on area boundaries to prevent OHV access into SLWA.
<i>Long-term strategies</i>
<ul style="list-style-type: none"> • Develop and implement a plan to assess short- and long-term use of the site (e.g., install trail count devices). • Monitor boundary fence conditions and boulder condition at former non-sanctioned access points and maintain as required.

- Each autumn, visually assess at boundaries and along trails for signs of off-trail trampling and take active remedial measures to address areas disturbed by off-trail use *during that same season*.
- Consult with managers of pipeline ROW to ensure that vegetation management is compatible with site use and access/trail management objectives.

Human Use/Safety Objective 3: Maintain a litter-free site.

Short-term strategies

- Conduct an initial site clean-up, targeting existing litter and large debris/artifacts on site, such as abandoned vehicles. Schedule any required large-debris clean-up for the non-breeding wildlife season.
- Provide waste receptacles at trailheads and service them at regular suitable intervals. Receptacles should be wildlife resistant, and bear- and raven-proof.
- Conduct an annual fall and spring site clean-up.
- Establish clean-up partnerships with stewardship or similar minded groups, as feasible.

Long-term strategies

- Refine all procedures as needed over time in response to available use/management data.

Human Use/Safety Objective 4: Identify safety risks, and then minimize, control and mitigate safety hazards to SLWA visitors.

Short-term strategies

- Set operational hours for the SLWA and post on signage at entrance and in parking area.
- Install signs at entrance describing permitted land uses (and prohibited uses)
- Render established informal boundary access points unusable, per Concept Plan.
- Consult with Fire Marshall and refine existing Fire Management Plan to suit implemented Concept Plan.

Long-term strategies

- Refine all safety-related plans and procedures as needed in response to available use/management data.

Human Use/Safety Objective 5: Allow for harvesting of edible and medicinal plants, in a controlled manner.

<i>Short-term strategies</i>
<ul style="list-style-type: none"> Establish concentrations of berry-producing shrubs native to this region in an open area that is easily accessible from a formal trail.
<i>Long-term strategies</i>
<ul style="list-style-type: none"> Collaborate with AFN stakeholders to establish populations of medicinal and traditional use species available for AFN harvest and easily accessible from a formal trail.

6.3.6 Education

Education Objective 1: Educate the public on the historic cultural use of the site by Indigenous peoples, the ecosystem services provided by SLWA, and importance of the site to local and regional wildlife populations.

<i>Short-term/Long-term strategies</i>
<ul style="list-style-type: none"> As per the Concept Plan, develop and install educational and culturally-informed signage along trails to deepen visitor engagement and awareness. Signage should address topics such as: <ul style="list-style-type: none"> historic First Nations use (e.g., Poundmaker Festival) the presence of areas with high archaeological potential within the SLWA provide Cree names of plant, animals, and places significant native plants such as saskatoon, currants, chokecherries, and mint, underscoring the ecological and cultural importance of these species ecosystem services provided by SLWA SLWA wildlife communities and SLWA role in landscape ecology

6.3.7 Construction – Adjacent and Within SLWA

Construction Objective 1: During construction activities, avoid direct and indirect negative impacts to surrounding biophysical resources within SLWA.

<i>Strategies for Work Within SLWA</i>
<ul style="list-style-type: none"> Ensure all applicable County, provincial and federal environmental approvals are in hand prior to construction. Ensure Contractor prepares an ECO Plan.

- Lay down sites must be located outside of SLWA or only at existing entrances to reduce the construction footprint, reduce accidental damage to vegetation and wildlife, and minimize risk of soil compaction. Satellite laydown areas with restricted uses may be required for amenities located more remote to the entrance.
- Laydown areas must be at least 30 m from wetlands.
- Prepare a temporary Erosion and Sedimentation Control (ESC) plan and implement prior to construction commencement. Sediment control measures should be inspected regularly to ensure proper function.
- Machinery must be cleaned of debris, free of fluid leaks, and in good working order *prior to entry* into SLWA.
- All fueling, lubricating, and servicing of equipment and machinery must be done a minimum of 100 m from any waterbody, including wetlands.
- Non-toxic hydraulic fluids, such as vegetable-based fluids, must be used in machinery working within 10 m of waterbodies in SLWA.
- A spill containment kit must be present at the construction site and must have the capacity to handle twice the volume of the maximum spill possible.
- After construction is complete, all waste material must be removed from the site.
- Remove all temporary ESC measures from site once the erosion and sedimentation risk is no longer present.

Strategies for Work Adjacent to SLWA- Third Party or County Projects

- All construction activities occurring adjacent to SLWA should have an ECO Plan including a temporary ESC plan in place prior to commencement of construction activities. Sediment control measures must be inspected regularly to ensure proper function.
- Soil should be stockpiled in designated areas away from SLWA boundary and stockpile perimeter controls installed to ensure runoff from the stockpile does not enter the site.
- Store all fuel a minimum of 100 m away from SLWA waterbodies, including wetlands.
- See also relevant hydrology strategies described above.

- Ensure all projects undertake a nest search of SLWA lands within 30 m of the project limits, prior to construction commencement and report findings to the County.

Construction Objective 2: During construction activities, avoid impacts to cultural and historical resources with SLWA.

Strategy for all Construction Projects Within SLWA

- Ensure *Historical Resources Act* Approval is in hand prior to construction
- Consult with AFN stakeholders as part of pre-construction planning.

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7.0 OPERATIONAL GUIDELINES

This management plan aligns with the County guiding principle to minimize capital, operational, and maintenance funding requirements. Following are operational guidelines for selected strategies to be implemented regularly, to assist the County during implementation of the new SLWA management initiatives. **Note to County: Please populate the final table column.**

Table 5. Operational Guidelines, Grouped by Management Focus.

Management Strategy	Schedule (Duration and Frequency)	Responsible Organization
<i>Soils</i>		
On an annual basis, visually assess trails and adjacent lands for signs of soil compaction and erosion. If observed, take immediate remedial action to address issues before they compound.	Once annually in the fall. Could be conducted at the same time as the fall clean-up.	
<i>Vegetation, including Wetlands</i>		
Undertake a targeted weed survey to document and map concentrations of noxious weeds and undesirable exotic species within the SLWA.	Assess weed presence annually, preferably in June or July when most weeds species are in flower.	
Manage noxious and prohibited noxious weeds using the County’s Vegetation Management Standards Policy, tailored to SLWA conditions. Use chemical treatment as a last resort only.	Manage weed populations as needed; weed management activities should be conducted outside of the critical nesting period for migratory birds (April 20 to August 20), as per ECCC guidelines.	
<i>Wildlife and Wildlife Habitat</i>		
Where snags are a safety hazard, cut tree to a height that is equivalent to the distance of the snag from the area of concern (i.e., trail or forest edge) to create a habitat tree. Leave tops of cut trees in the SLWA to function as deadwood.	Assess annually in the fall, following the critical nesting period for migratory birds.	

Human Use and Safety	
Conduct an initial site clean-up, removing existing little and dismantling illegal hunting camps.	One-time effort, preferably during the first year following management plan adoption.
Service County-provided waste receptacles.	Monthly, initially. Service frequency should be determined based on level of use during the first and subsequent operational years.
Conduct an annual fall and spring site clean-up.	Annual spring and fall effort.

8.0 CHALLENGES AND OPPORTUNITIES

The location, natural character and size of SLWA present several ongoing challenges to its effective management. Issues such as after-hours surveillance remain a concern owing to the site's relatively secluded nature and abundant natural cover that make it difficult to monitor activities outside designated operating hours. The County will need to monitor the level of management required to control unauthorized uses such as illegal camping, hunting, OHV use, fires, and dumping. Waste management is another persistent challenge, as increased recreational use necessitates proper waste disposal infrastructure and regular maintenance to prevent littering and associated ecological impacts. Fire management also remains a priority, particularly during dry seasons, with proactive measures needed to mitigate the risk of wildfires, control any fires that do occur and ensure public safety.

Conversely, SLWA also offers significant opportunities, particularly through collaboration with adjacent landowners and stakeholders. The proximity of the Alexander First Nation presents a unique opportunity to build partnerships focused on ecological stewardship and cultural education. Collaborating with the AFN can facilitate integration of Indigenous knowledge and values into management practices, fostering stronger relationships and enhancing community engagement. Such a partnership could also support the development of cultural programming and shared initiatives.

The rich biophysical resources at SLWA also offer opportunities to partner with suitable local and regional organizations with a shared interest in plant and wildlife surveys and educational activities. Collaborative programming opportunities should be explored.

9.0 TRACKING THE MANAGEMENT PLAN PERFORMANCE

This management plan should be viewed as a living document. It will require periodic review to ensure that management objectives are being met and/or remain appropriate. The County will need to establish review periods and key performance metrics for the plan, both conservation metrics and operational metrics, to determine when and how often the plan should be updated. Despite best management, there may also be a need to revise the plan owing to changing SLWA conditions resulting from climate change, changing conditions on adjacent lands, or changing prevailing societal values.

10.0 CONCLUSIONS

In conclusion, the SLWA Management Plan establishes a comprehensive framework for balancing ecological needs with sustainable public use. By prioritizing the protection of sensitive habitats, promoting low-impact recreational activities, and addressing key challenges such as restricting prohibited activities, this plan aims to maintain the SLWA's ecological integrity while fostering public appreciation for its natural beauty. Collaborative opportunities with the Alexander First Nation and other like-minded groups offers an exciting opportunity to integrate traditional ecological knowledge and strengthen

community stewardship of this valuable natural area. With a focus on sustainable use and proactive management strategies, this management plan will support preservation of the SLWA regional ecological and cultural significance for generations to come and will assist in sustaining natural systems on adjacent ESA lands.

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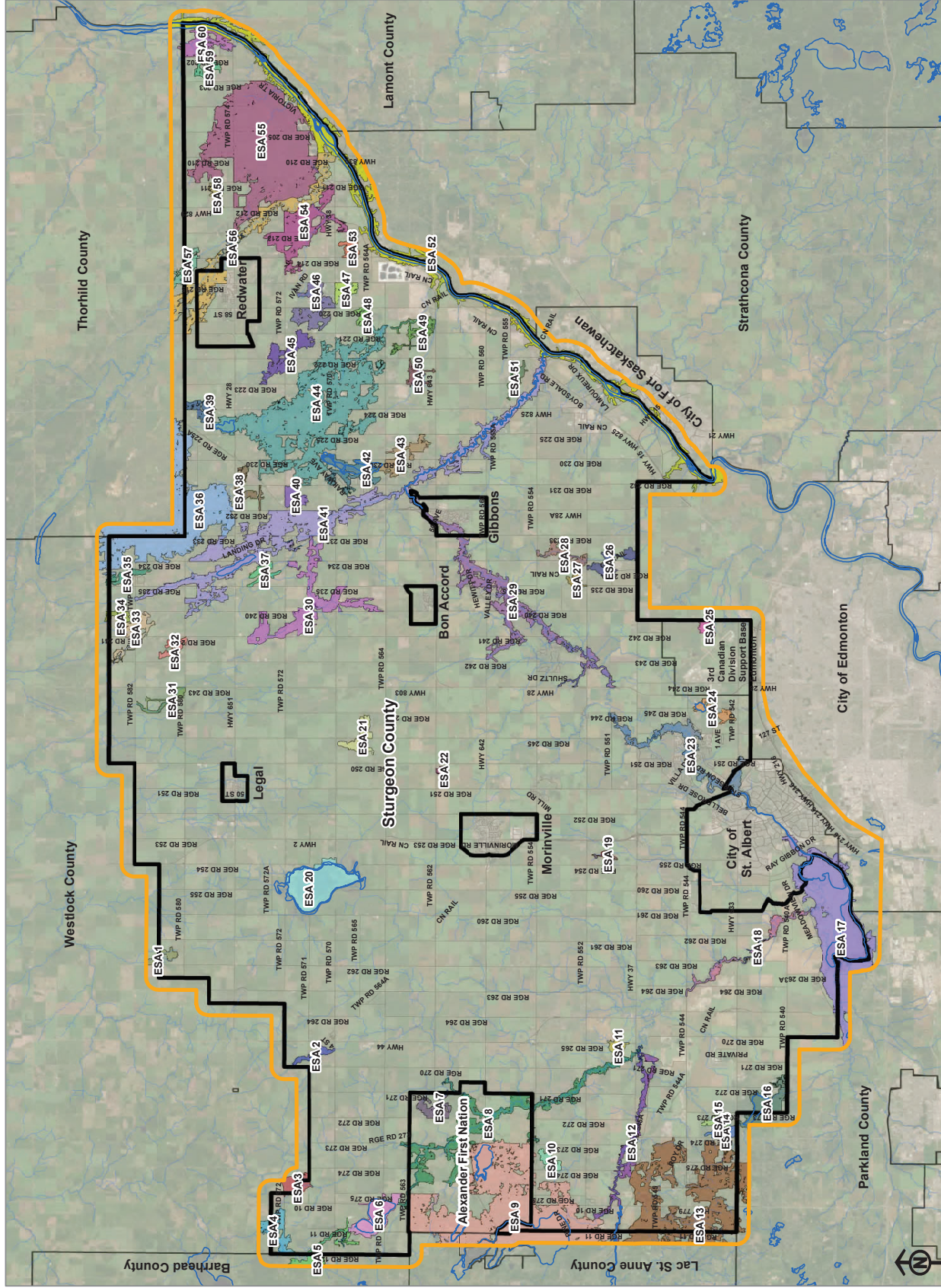
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Appendix A

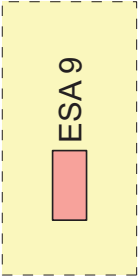
2023 ESA Inventory Data Sheet for ESA #9

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Figure 3.1.
Overview of
2023 Sturgeon County ESAs
Sturgeon County
Environmentally Significant
Areas Update



- Legend**
- Sturgeon County Environmentally Significant Area (2023)
 - Study Area
 - County Boundary
 - Hydrology (Altalis 1996)



Sturgeon
COUNTY



SPENCER ENVIRONMENTAL
 MANAGEMENT SERVICES LTD.

Imagery: Sturgeon County 2021; ESRT Online (Date Not Known)
 Map Date: 13 November 2023

20,000 Metres

10,000

5,000

1:240,000

*Database watercourses are presented as-is and not field adjusted.

Appendix B

SLWA Final Concept Plan-Conservation Approach

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CONCEPT PLAN - A CONSERVATION APPROACH

The Sandy Lake Wilderness Area (SLWA) holds potential as both a recreational destination and a preserved natural environment. However, findings from the **SLWA What We Heard Report** (September 2021) highlighted over 123 public comments on the negative impacts of human activity on the area, emphasizing environmental consequences and effects on neighbouring communities.

In response, the concept plan presents a balanced approach to foster responsible development that accommodates human use while prioritizing ecological sustainability. This approach aims to conserve SLWA's natural features—including vegetation, wildlife habitats, hydrology, and water resources—by defining development boundaries and outlining protection measures for sensitive areas to minimize human impact.

Main Features:

1. Reclaim and enhance the site's natural landscape features.
2. Emphasize extensive, passive recreational activities centered on trail experiences.
3. Utilize existing trails with minor improvements to address tread irregularities and safety concerns.
4. Minimize capital, operational, and maintenance funding requirements.

Site Program & Amenity Recommendations:

1. **Environmentally-Compatible Passive Uses:**
Design the site to encourage passive recreational activities that align with the conservation goals of an Environmentally Significant Area. Such uses should focus on minimizing human impact, fostering visitor appreciation for the natural landscape, and supporting habitat conservation efforts.
2. **Wildlife Friendly Fencing:**
Redesign boundary edges to manage the area effectively and control OHV access while supporting local wildlife migration:
 - + **North and South Boundaries:** Remove the existing barbed wire fencing to facilitate wildlife movement. Place boulders approximately 1.5 to 2 meters apart to restrict OHV access while keeping the area open for animals.
 - + **East Boundary:** Remove the existing barbed wire fence along Range Road 10. Replace it with wildlife friendly fencing that provides boundary management and OHV control while allowing for safe wildlife passage.

3. **Designated Parking Area:**
Restrict vehicle access into natural zones by establishing a designated parking area. This arrangement will reduce habitat disruption and protect wildlife from vehicular disturbances, creating a safer, more protected wilderness environment.

4. **Colour-Coded Trail Markers:**
Install stone trail markers with a color-coded system to guide visitors' while blending seamlessly with the landscape.

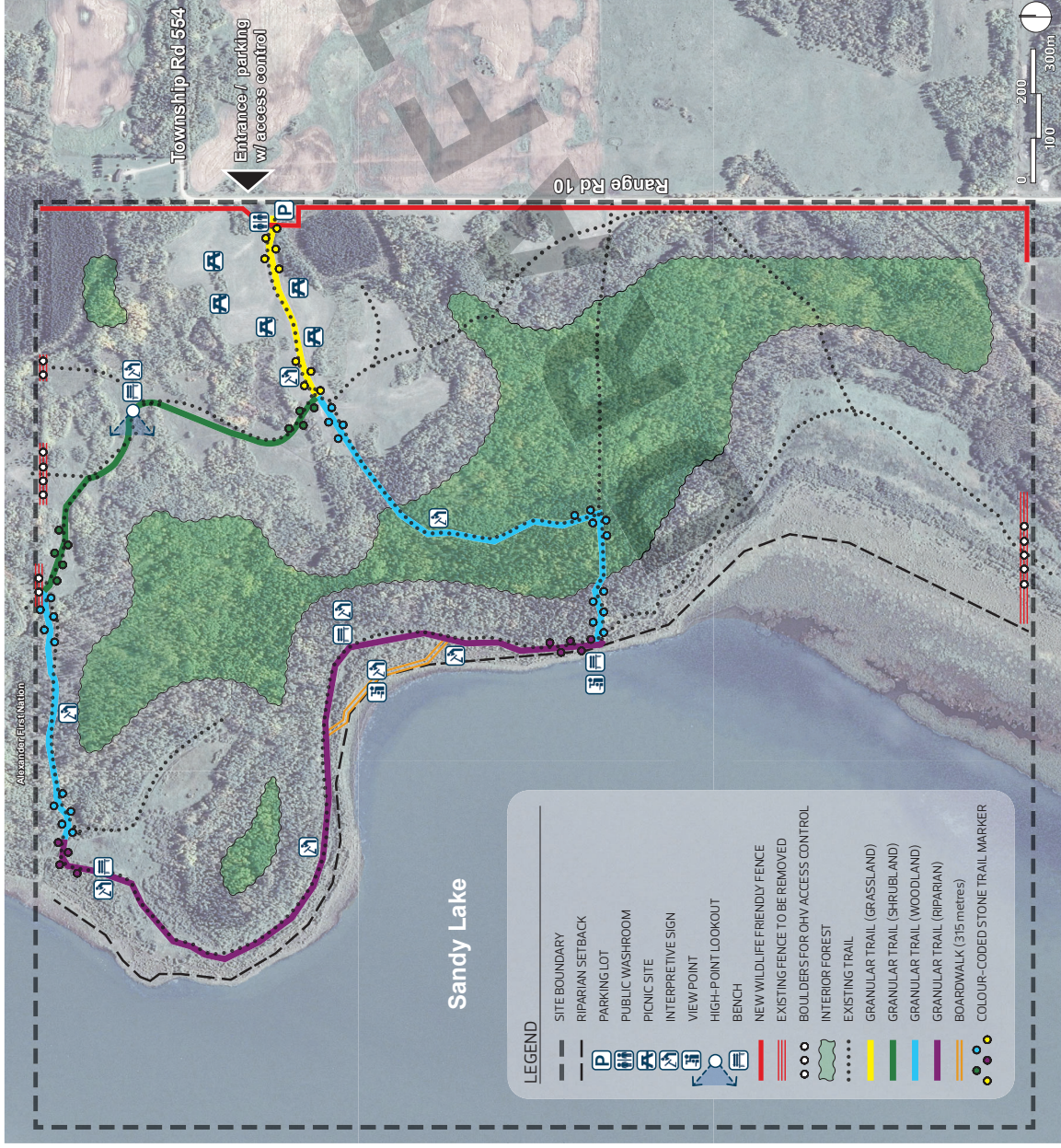
5. **Picnic and Gathering Areas with Fire Boxes:**
Create designated picnic sites that include fire boxes to allow for safe, controlled fire use. These areas should be situated in open spaces that limit disturbance to the surrounding habitats, giving visitors a welcoming space to enjoy the outdoors responsibly.

6. **Resting Areas with Benches and Animal Resistant Waste Receptacles:**
Provide resting points with comfortable benches and animal resistant waste bins along the trails. This will encourage responsible waste disposal while giving visitor's spaces to pause and enjoy the natural surroundings.

7. **Boardwalk with View Points:**
Install boardwalks at select, sensitive locations to protect the ground while allowing visitors to experience and observe the ecosystem. Include small, thoughtfully-placed view points to provide unobstructed views of the area.

8. **High Point Viewing Area of Sandy Lake:**
Develop a high-point lookout with unobstructed views of Sandy Lake, allowing visitors to experience panoramic landscapes without entering sensitive areas.

9. **Educational and Interpretive Signage:**
Implement an educational and culturally-informed signage program to deepen visitor engagement and awareness. This includes:
 - + **Cultural and Historical Signage:** Place interpretive signs at key seating areas to inform visitors about the area's rich cultural heritage. Signs can include names of plants, animals, and places in Cree.
 - + **Ethnobotanical Signage:** Integrate signs along trails identifying significant native plants like Saskatoon, currants, chokecherries, and mint, underscoring the ecological and cultural importance of these species.



CONCEPT PLAN - DRAFT

SANDY LAKE WILDERNESS AREA

OCTOBER 2024

PREPARED FOR: **Sturgeon County**



PREPARED BY:

SPENCER ENVIRONMENTAL
MANAGEMENT SERVICES LTD.



Appendix C
Representative Site Features

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Site Features



Wetland (Marsh)



Wetland (bog)



Wetland (shrubby swamp)



Shoreline marsh / riparian habitat



Open grass and shrubland habitat



Cleared, grassy areas



Interior forest



Open-canopy deciduous forest



Mixwood interior forest



Culturally important plants



Wildlife use



Wildlife use



Footprint of past recreational use



Informal trail to be reclaimed



Weed infestation



Tree damage