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Item No. 15.1
Community Planning & Economic Development Standing Committee
June 21, 2018

TO: Chair and Members of the Community Planning & Economic Development
Standing Committee

Original Signed

SUBMITTED BY:

Kelly Denty, Acting Director of Planning & Development

Original Signed

Jacques Dubé, Chief Administrative Officer

DATE: June 12, 2018

SUBJECT: Halifax Green Network Plan

ORIGIN

- Halifax Regional Municipal Planning Strategy, October 2014:
 - *Policy E-12: HRM shall prepare a Greenbelting and Public Open Space Priorities Plan to protect and preserve connectivity between natural areas and open space lands, to enable their integration into sustainable community design, to help define communities, to benefit the Municipality's economy and the physical health of its people, and to reflect and support the overall purposes of this Plan.*
- On April 25, 2017 Regional Council the following motion was put and passed:
 - *That Halifax Regional Council direct that staff use the Halifax Green Network Plan Primer December 2016, attached as Attachment A of this report, as the framework for the final phase of public engagement, and for the development of the full consolidated Halifax Green Network Plan, and that staff return to Council for its consideration of the resulting Plan.*

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, clauses 79(1)(k)(ai):

- (1) The Council may expend money required by the Municipality for
- (k) recreational programs;

- (ai) public grounds, squares, halls, museums, parks, tourist information centres and community centres;

Halifax Regional Municipality Charter, clauses 229(1)(c)(d)(g)(j)(q):

- (1) A municipal planning strategy may include statements of policy with respect to any or all of the following...
 - (c) the protection, use and development of lands within the Municipality, including the identification, protection, use and development of lands subject to flooding, steep slopes, lands susceptible to subsidence, erosion or other geological hazards, swamps, marshes or other environmentally sensitive areas;
 - (d) stormwater management and erosion control;
 - (g) studies to be carried out prior to undertaking specified developments or developments in specified areas;
 - (j) municipal investment for public and private development and the coordination of public programs relating to the economic, social and physical development of the Municipality; and
 - (q) any other matter relating to the physical, social or economic environment of the Municipality.

Administrative Order One, the *Procedures of the Council Administrative Order*, Schedule 3, Community Planning and Economic Development Standing Committee Terms of Reference, clauses 3 (a)(e)

- 3. The Community Planning and Economic Development Standing Committee shall provide oversight of the Municipality's Regional Plan and Regional Planning Initiatives, as follows:
 - (a) overseeing the Municipality's Regional Plan and Regional Planning Initiatives;
 - (e) overseeing the priority setting relative to the Community Visioning Program, Functional Plan Implementation and major planning projects.

RECOMMENDATION

It is recommended that the Community Planning & Economic Development Standing Committee recommend that Regional Council:

- 1. Authorize the direction contained in the Halifax Green Network Plan, as contained in Attachment A, as a framework for amending the existing Regional Plan and Secondary Planning Strategies, and developing new planning documents as may be necessary to implement the Halifax Green Network Plan direction;

2. Direct staff to carry out the actions contained in the Halifax Green Network Plan as part of the multi-year budgeting and business planning process.
3. Request that the Province amend the *Halifax Regional Municipality Charter*, as set out in Actions 18 and 61 of the Halifax Green Network Plan, to:
 - (a) enable the Municipality to acquire sensitive environmental lands (e.g. riparian areas, wetlands, steep slopes, etc.) as an environmental reserve through the land development and subdivision process, in addition to existing parkland dedication provisions; and
 - (b) enable a greater range of legislative abilities, such as the ability to enact parkland dedication requirements based on density to address development that does not include the subdivision of land.
4. Initiate the process to consider amendments to the Regional Municipal Planning Strategy (RMPS) to support the Halifax Green Network Plan (HGNP) by referencing the HGNP within the conservation design development agreement policy criteria concerning the connectivity of open space; and
5. Adopt, by policy, the Public Participation Program outlined in the Community Engagement section of this report.

BACKGROUND

The Halifax Green Network Plan (HGNP) was initiated in 2015 shortly after the adoption of the 2014 Regional Municipality Planning Strategy (Regional Plan). The 2014 Regional Plan directs the creation of the priorities plan to:

“...protect and preserve connectivity between natural areas and open space lands, to enable their integration into sustainable community design, to help define communities, to benefit the Municipality’s economy and the physical health of its people, and to reflect and support the overall purposes of this Plan.”

Originally entitled the “Greenbelting and Public Open Space Priorities Plan”, the plan was renamed in 2015 to the Halifax Green Network Plan (HGNP) to better reflect the comprehensive scope of the initiative and its review of all forms of green space in the region.

The HGNP planning process consisted of the following three phases.

Phase 1: Foundations (completed in Winter 2016)

Objective: To understand what we have, what we value, and where we want to go

Outcomes:

- State of the Landscape Report, which reviewed the Region’s current open space assets, strengths and challenges;
- Phase 1 “What We Heard” Engagement Report, which summarized all public feedback received during Phase 1; and

- Cultural Landscapes Framework Report, which conducted a preliminary assessment of the Region's cultural landscapes.

Phase 2: Planning Directions (completed in Winter 2017)

Objective: To understand landscape impacts and detailed ecological assessment, refine open space network scenarios and options, and develop planning and implementation directions.

Outcomes:

- Halifax Green Network Plan Primer, which provides preliminary policy direction for the final plan for public and stakeholder discussion and feedback; and
- Phase 2 "What We Heard" Engagement Report, which summarized all public feedback received during Phase 2.

Phase 3: Final Plan (Completed with this report)

Objective: To adopt a final priorities plan that guides Municipal decisions and actions related to land use planning, park network management, project work and partnerships, among other initiatives.

Outcomes:

- Final Halifax Green Network Plan, (Attachment A) which contains detailed objectives and actions; and
- Phase 3 "What We Heard" Engagement Report, which summarizes the feedback received on the primer report.

All completed HGNP studies and reports are found on the project website at the following link www.halifax.ca/HalifaxGreenNetwork

DISCUSSION

After extensive research and public engagement, the development of the HGNP is now complete and provides the detailed direction needed to help guide municipal decisions related to the sustainable management of the Region's network of parks and natural open spaces. The following sections review the Plan's key highlights, response to Regional Plan direction, and implementation.

Key Highlights

Overall, the HGNP shows that the Region has a remarkably diverse and intact system of green spaces. While the HGNP identifies areas for improvement, fortunately, the direction contained in the HGNP is able to build on HRM's existing assets and policy context. The following highlights key objectives and actions contained in the final HGNP according to the plan's five theme areas: 1) Ecology; 2) Working Landscapes; 3) Community Shaping; 4) Outdoor Recreation; and 5) Cultural Landscapes.

Ecology

The landscape of the Region contains a diverse range of ecosystems including Acadian forests, rock barrens, wetlands and coastal areas. These ecosystems provide important habitats and critical ecosystem services, such as providing a reliable supply of fresh drinking water and managing stormwater runoff. Managing these areas requires balancing ecological integrity with human activity to ensure that key areas are protected and the benefits of natural ecosystems are maintained.

Goal: To support a healthy and sustainable natural ecosystem.

Key Highlights:

- adopt the HGNP Ecology Map (Map 5) in the Regional Plan;
- consolidate and apply environmental protection zones to large wetland complexes and vulnerable land forms;
- refine and strengthen existing variable watercourse buffering requirements;
- support naturalized approaches to storm water management; and
- request an amendment to the *HRM Charter* to enable the Municipality to acquire environmental reserves through the subdivision and development process, in addition to parkland dedication requirements.

Working Landscapes

Working landscapes are open spaces that support economic activity, such as resource extraction (e.g., mining, forestry), agriculture and tourism. These industries are important components of the Region's economy, especially in rural areas, and provide local resources for the Region's food, construction and manufacturing sectors. Well-managed working landscapes enable private land owners to benefit from their land holdings while contributing to natural landscape connectivity.

Goal: To support the sustainable use and management of the Region's natural resources.

Key Highlights:

- provide greater as-of-right opportunities for primary resource industries;
- limit or prohibit conservation design developments in the Regional Plan's Agricultural Designation; and
- relax restrictions on tourism related home-based businesses in rural areas and consider large scale rural based tourism proposals by rezoning or development agreement, where not already permitted.

Community Shaping

Open spaces shape communities and contribute to a sense of place. By considering the Green Network, valued open spaces can help establish clear community edges, natural connections and focal points, while contributing to the health and sustainability of neighbourhoods.

Goal: Use the Green Network to guide the growth and development of communities.

Key Highlights:

- consider the Green Network when reviewing and considering changes to the Urban Service Area, the Urban Settlement Designation and Urban Reserve Designation;
- prioritize the development of brownfield and infill sites over greenfield development areas;
- prioritize the preservation and creation of natural connections to the Chebucto Peninsula; and
- streamline development approval processes within clearly defined rural centres, while carefully controlling the scale and design of conservation design development proposals in areas located between these rural centres.

Outdoor Recreation

Much of the Municipality's outdoor recreation service delivery takes place on our diverse network of public parks. These parks can be described as important parcels of land, defined by natural and human

influences, that welcome people of all ages and abilities into its public realm to play, reflect and share their experiences.

Goal: Manage a municipal park network that meets the outdoor recreation needs of residents and visitors, supports ecological and cultural conservation, and shapes community form and identity.

Key Highlights:

- promote the importance of parks for community health and well-being through improved communications and engagement and by accommodating all ages and abilities;
- establish a Park Spectrum that captures the range of user experiences and supports both recreation and natural systems and includes Federal and Provincial parks and school grounds;
- evaluate service delivery gaps and overlap;
- use the land capability tool, included in the HGNP, to evaluate existing and proposed parks;
- establish an Open Space Network in cooperation with provincial and federal governments and conservation groups;
- continue to place emphasis on establishing the Regional Parks identified in the Regional Plan, while recognize new nature parks and open space areas; and
- request an amendment to the *HRM Charter* to enable the Municipality to establish parkland dedication requirements based on density.

Cultural Landscapes

The landscape of the Halifax Region is characterized by a complex history of human habitation dating back over 10,000 years. Cultural Landscapes reflect the interaction between people and nature over time and include landscapes that have been created, used, modified or protected - from historic gardens to heritage conservation districts, from streetscapes to scenic views.

Goal: Identify, preserve and celebrate cultural landscapes and their value in connecting people to the land and telling their stories.

Key Highlights:

- develop a cultural landscape program through the Culture and Heritage Priorities Plan (CHPP);
- clarify the scope and role of cultural landscapes studies as part of master planning exercises; and
- proactively engage underrepresented groups to identify valued cultural landscapes.

Regional Plan

Regional Plan Policy E-11 directs the development of the HGNP and outlines the items that the Plan may consider. The following table reviews these considerations in terms of the direction contained in the HGNP.

Table 1: Regional Plan Policy E-11

E-11 A Greenbelting and Public Open Space Priorities Plan may consider:	
Regional Plan Considerations	HGNP Response
(a) coordinating and managing a program to research, identify and designate potential natural areas, systems and distinct landscapes, natural corridors and critical ecosystem linkages, and	Chapter 4.1, Ecology, contains the HGNP ecology Map (Map 5) that identifies core natural areas and wildlife corridors and recommends that the map be incorporated into the Regional Plan to guide policy

significant natural habitats to guide future development (see Map 5, Significant Habitats and Endangered Species and Appendix C: Species at Risk in HRM 2013);	decisions related to urban boundaries, regional parks and conservation design development agreements. This map may replace the existing Significant Habitats and Endangered Species map contained in the Regional Plan which is noted for context, but does not currently guide any policy decisions.
(b) coordinating and managing a program to research and identify potential public open space parks and corridors for the provision of quality open space for recreational and social development, restoration of natural corridor and urban ecosystem function, greenway networks to connect communities and provide mobility options and significant natural habitats to guide considerations of future development;	Chapter 4.3, Community Shaping, contains several objectives and actions to guide future development in relation to the Green Network. HGNP Chapter 4.4, Outdoor Recreation, provides direction for managing public open space, and assisting with fostering mental, physical and social well-being.
(c) establishing selection criteria, investment and management guidelines for public open space lands, infrastructure and sustainable natural open space management strategies;	Chapter 4.4, Outdoor Recreation, contains a number of objectives and actions to guide parkland acquisition, investment and management strategies, including a Land Capability Analysis Tool (Appendix B).
(d) examining criteria for classifying and developing HRM parks including comprehensive criteria for designating Regional Parks;	Chapter 4.4, Outdoor Recreation, recommends the adoption of a Park Spectrum approach that supports both recreation services delivery and natural systems protection and which includes Federal and Provincial parks and school grounds.
(e) assessing opportunities to further the development and establishment of management plans for the 1975 Regional Park System, the new Regional Parks proposed under this Plan, and other areas identified for their potential as regional parks;	Chapter 4.4, Outdoor Recreation, outlines specific direction for the Regional Parks identified in the Regional Plan. New Nature Regional Parks and open space areas are also identified.
(f) developing an evaluation methodology and criteria for determining land capability and functionality in meeting standards for the delivery of public open space services, open space conservation, community development and growth management;	Appendix B establishes a Land Capability Analysis Tool that is intended to be used to evaluate existing and proposed parklands in order to assist the municipality in acquisition and disposal decisions
(g) developing a system of interconnected public and natural undisturbed open spaces throughout HRM to include HRM parks, coastal areas and	The HGNP provides direction for maintaining a Regional Green Network consisting of ecological sensitive areas, working landscapes, public

watercourse shorelines, water route and land-based greenways as illustrated on the Trails and Natural Network Map (Map 3), multi-functional streets, environmental and cultural conservation areas, schools, natural corridors, habitats as well as other public and community facilities;	parklands and cultural landscapes. This direction includes considering and cooperating with other levels of government.
(h) establishing a greenway network that includes a variety of corridors such as linear parks, hiking trails, nature trails and scenic loops;	Chapter 4.4, Outdoor Recreation, provides direction for connections between parks and open space areas, that may include trails and ecological corridors. Direction concerning broader AT and mobility objectives are outline the Integrated Mobility Plan (IMP) and Active Transportation (AT) Priorities Plan.
(i) including a comprehensive planning approach for the retention of coastal and freshwater lake access and incentives for the protection of watercourse buffers;	Chapter 4.1, Ecology, provides direction to improve the protection of watercourse buffers. This chapter also recommends an <i>HRM Charter</i> amendment to enable the Municipality to acquire environmental reserves through the subdivision and development process. Chapter 4.4, Outdoor Recreation, has direction pertaining to connectivity to water bodies for recreation.
(j) developing an operational framework to include community partners, Federal and Provincial departments, non-profit groups and private sector companies; and	The Municipality engaged a wide variety of government and non-government stakeholders in preparing the HGNP. In addition, the HGNP emphasizes the importance of fostering partnerships to manage a sustainable Green Network and identifies several partnership opportunities.
(k) identifying, in cooperation with the Federal and Provincial government, species-at-risk habitats and annually review the Significant Habitats and Endangered Species Map (Map 5) and Appendix C: Species at Risk in HRM, 2013 contained in this Plan.	Federal and Provincial governments were consulted in preparing the HGNP and species at risk information contributed to the creation of the HGNP Ecology Map (Map 5). In addition, the HGNP provides direction for establishing partnership with the Federal and Provincial governments for monitoring the Region's biodiversity.

Implementation Tools

The HGNP recommends a total of 79 actions needed to effectively support the Plan's vision, goals and objectives. The following sections describe the HGNP implementation tools.

Land Use Planning

The Municipality has adopted a number of land use policy and regulatory documents, including the Regional Plan, the Regional Subdivision By-law, secondary plans and land use by-laws, that control development on privately owned land. Together, these documents, among many other matters, regulate the location, shape and form of development including if and where new public roads can be constructed, the design and density of new development, parkland dedication requirements and watercourse setbacks. The HGNG recommends 27 actions that provide guidance and specific instructions on how to amend these planning documents through future project work.

Park Network Management

As the Municipality moves forward, there are a number of action items specific to the management of municipal parkland that support the goals and objectives set out in the HGNP. Initiatives range from changing policies regarding parkland dedication and how recreation service is delivered to promoting parks and open space for health and wellness, and having a formalized public engagement program. The HGNP recommends 22 actions related to park network management.

Current and Future Project Work

The Municipality is continually carrying out project work on a wide variety of items, from considering the development of new municipal business parks to reviewing corporate policies and by-laws. A number of the actions contained in this Plan guide current and future project work. Some projects may lead to strategic investments, programs, policies or regulations. The HGNP recommends 16 actions that guide current and future project work.

Partnerships

While the Municipality is a key government body in the Region, responsibility for managing the environment is shared between multiple levels of government, including Nova Scotia Environment and the Provincial Department of Natural Resources. Universities, non-profits and community groups also bring valuable expertise, information and resources to conservation efforts. Private landowners play an integral role in stewarding natural resources and investing in sustainable development approaches. The cultivation of partnerships, therefore, is important to carrying out many of the objectives identified in this Plan. The HGNP identifies 14 partnership opportunities.

Timeframe and Resource Implications

The HGNP discusses timeframes as well as the budget and resource implications associated with the recommended actions. In general, the HGNP direction is intended to be carried out with existing resources as part of the business plans for individual business units. For example, actions related to amending official planning documents guide the scope of the next Regional Plan review and plan and by-law simplification program. Similarly, actions related to managing the Municipality's park network guide the preparation of the Parks & Recreation business unit's annual business plans. However, the HGNP also recognizes that some recommended actions, such as partnership opportunities, may lead to the development of new programs or identify strategic investments. Any resulting resource implications associated with the HGNP actions will be considered through the business planning cycle or project specific Council reports.

The timeframes outlined in the HGNP include items that provide immediate and on-going guidance to municipal activities and decisions, as well as actions that are expected to be implemented in a short (1-2 year), medium (2-4) or long (4-7 year) timeframe. These timeframes assume no additional resources are

dedicated to implementing the HGNP. Should Council decide that actions should be implemented within a shorter timeframe, staff advise that consideration would need to be given to resource needs through the regular budget and business planning cycle.

Immediate Regional Plan Amendment

Since 2006, the Regional Plan has permitted new large-scale rural housing developments only through the conservation design development agreement process. The conservation design approach is a creative form of subdivision designed to conserve open space and significant environmental features, such as wetlands, while clustering development in suitable areas. The existing conservation design development policies effectively conserve open space within proposed developments and support many of the HGNP objectives. However, there is little policy direction to consider broader regional landscape patterns and connectivity, which may inadvertently allow development within important wildlife corridors. Specifically, Regional Plan Policy S-17 states:

S-17: For any conservation design development application made pursuant to policies S-14, S- 15 or S-16, HRM shall consider the following criteria:

- (k) connectivity is maintained with any open space on adjacent parcels and trails and natural networks, as generally shown on Map 3;*

While the above policy criteria are helpful, it is limited due to it's specific reference to Map 3 of the Regional Plan. Map 3 does not map the important and essential wildlife corridors shown on the HGNP Map 5. Consequently, to avoid potential conflicts in the near term, staff recommend that Council initiate a narrowly focused amendment to the Regional Plan's conservation design development agreement policies to reference the HGNP. As the HGNP explains, broader Regional Plan policy changes will be implemented through the next Regional Plan review and plan and by-law simplification program.

Conclusion

As envisioned by the 2014 Regional Plan, the HGNP provides the coordinated and clear direction needed to help guide municipal decisions and support a sustainable network of green spaces. The specific actions set out in the HGNP build on the Region's assets and policy context and will continue to promote the Municipality's leadership role in stewarding the Region's environment. While further works lays ahead, the HGNP focuses municipal actions and promotes the key partnerships that are essential to the sustainable management of the Region's rich and diverse Green Network.

FINANCIAL IMPLICATIONS

All actions contained in the HGNP are expected to be able to be carried out as part the business plans for individual business units. No new staff or budget items specific to the HGNP actions are anticipated at this time. However, project work and partnership opportunities may lead to the development of new programs or identify strategic investments. Any resulting budget implications will be considered through the business planning cycle or project specific Council reports.

RISK CONSIDERATION

Regional Plan Amendment

There are no significant risks associated with the recommendation to initiate a process to amend the Regional Plan to reference the HGNP within the conservation design development agreement policies. This direction involves proposed RMPS amendments. Such amendments are at the discretion of Regional Council and are not subject to appeal to the N.S. Utility and Review Board. Information concerning risks and other implications of adopting the proposed amendments are contained within the Discussion section of this report.

HGNP

There are risks associated both with adopting or rejecting the HGNP. The HGNP contains a number of actions that will be reviewed as part of future Council reports. Any risks associated with future changes to policies or by-laws will be identified as part of these future staff reports.

In identifying proposed actions aimed at better protecting the natural environment, there is a risk that land owners and developers will advance development proposals in the short term to avoid potential new regulations. However, these risks are mitigated by existing controls and planning processes that provide the opportunity to consider the HGNP. The proposed immediate Regional Plan amendment concerning conservation design development agreements is further intended to mitigate this risk.

Should the HGNP not be adopted, there is a risk that the direction contained within the Plan is not implemented and for municipal land management decisions to not support a connected Green Network and the Region's long-term sustainability.

COMMUNITY ENGAGEMENT

HGNP

Three phases of region-wide community and stakeholder engagement were conducted between May 2015 and June 2017. Engagement efforts included a total of 26 open houses, 11 stakeholder workshops, surveys, and the use of an interactive mapping tool. In total, participants provided over 10,000 comments as well as 1,051 'push pins' on the interactive map.

The final phase of public engagement, based on the direction outlined the HGNP Primer report, included six public meetings held in May and June 2017. While preparing the final HGNP, staff also consulted key stakeholders on items related to their area of expertise including consultations with Halifax Water, Our HRM Alliance, Fisheries and Oceans Canada, Nova Scotia Environment, the Nova Scotia Department of Natural Resource, and the Nova Scotia Department of Transportation and Infrastructure Renewal.

The input received from residents, community and industry groups, and provincial government departments through all phases of the project meaningfully contributed to the development of the HGNP. For more information, please see the "What We Heard" reports posted on the HGNP webpage. www.halifax.ca/HalifaxGreenNetwork

Regional Plan Amendment

Should Regional Council choose to initiate the RMPS amendment process related to the Regional Plan

conservation design development agreement policies, the *HRM Charter* requires that Regional Council approve a public participation program. In February of 1997, Regional Council approved a public participation resolution which provides broad discretion on the consultation process required for MPS amendments that are regional in nature. The 1997 policy provides that, for amendments that are regional in nature, staff would recommend an appropriate public participation program. Accordingly, staff recommends that Regional Council obtain stakeholder and public feedback through the Municipal website given the extensive public consultations carried out through the HGNP.

In addition to this public participation, the *HRM Charter* requires a public hearing to be held before Regional Council can consider approval of any amendments.

ENVIRONMENTAL IMPLICATIONS

The HGNP directly addresses a number of environmental objectives in the Regional Plan and outlines many strategic actions for addressing multiple environmental issues. These include water resource management, landscape fragmentation, climate change adaptation and mitigation, stormwater management and flood mitigation, food security, and habitat protection.

ALTERNATIVES

The Community Planning and Economic Development Standing Committee may choose to recommend that Regional Council:

1. Modify the proposed HGNP. If this alternative is chosen, specific direction regarding the requested modifications is required. In addition, a supplementary report may be required depending on the extent of the changes.
2. Refuse to adopt the HGNP. This alternative is not recommended as it could result in poorly coordinated Municipal land management decisions that do not support a connected Green Network and the Region's long-term sustainability.
3. Not request that the Province amend the *HRM Charter*, as set out in Actions 18 and 61 of the Halifax Green Network Plan, to enable the Municipality to acquire sensitive environmental lands as an environmental reserve through the land development and subdivision process, in addition to existing parkland dedication provisions; and enable a greater range of legislative abilities, to enact parkland dedication requirements based on density to address development that does not include the subdivision of land.
4. Initiate the consideration of potential policy that would differ from those outlined in this report. This may require a supplementary report from staff.
5. Refuse to initiate the RMPS amendment process. A decision of Council not to initiate a process to consider amending the Regional Plan is not appealable to the NS Utility and Review Board as per Section 262 of the *HRM Charter*.

ATTACHMENTS

Attachment A: Halifax Green Network Plan (HGNP)

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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Report Approved by: Kate Greene, Policy & Strategic Initiatives Program Manager, 902.225.6217

The background of the entire page is a close-up photograph of green leaves, showing detailed vein patterns. The leaves are in various shades of green, from light to dark, creating a textured and naturalistic backdrop.

HALIFAX

GREEN NETWORK PLAN

JUNE 2018

Prepared by:

Halifax Regional Municipality

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O2 PLANNING + DESIGN

HALIFAX

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1 Introduction

Halifax Regional Municipality (HRM) benefits from the full spectrum of open spaces, ranging from local neighbourhood parks to regional parks and wilderness areas. These open spaces function as the foundation for a sustainable Green Network; a system that shapes settlement, protects important ecological functions, retains lands for agricultural and forestry uses and provides recreational opportunities. The Halifax Green Network Plan (HGNP) builds upon these incredible natural assets to promote the long-term sustainability of the Region.

1.1 THE PLAN'S PURPOSE & ROLE

Open spaces are interconnected and interdependent. Actions in one area can have multiple impacts in others. Open spaces also offer multiple benefits when they are well-managed and considered holistically. However, these benefits can degrade or disappear if spaces are not maintained or protected. The Halifax Green Network Plan (HGNP) defines an interconnected open space system, highlights ecosystem functions and benefits, and outlines strategies to manage open space. Specifically, the HGNP provides land management and community design direction to:

- » Maintain ecologically and culturally important land and aquatic systems
- » Promote the sustainable use of natural resources and economically important open spaces
- » Identify, define and plan land suited for parks and corridors

This document is organized into the following chapters:

- 1. Introduction:** Outlines the plan's purpose and core open space planning concepts
- 2. Background:** Describes the detailed research, analysis and public engagement work carried out in preparing this Plan
- 3. Vision & Principles:** Provides the vision and principles that guide this Plan
- 4. The Green Network:** Provides the objectives and specific actions needed to support the vision and principles
- 5. Monitoring:** Outlines the key information and partnerships needed to monitor the ecological health of the Region and progress towards the Plan's, vision, principles and objectives
- 6. Implementation:** Categorizes actions according to the type of implementation tool and outlines timeframe and resource implications

1.2 THE IMPORTANCE OF OPEN SPACE

Open spaces include all natural, working, recreational, built and cultural landscapes. The *Regional Plan* identifies the diverse ways that open spaces contribute to a healthy, sustainable and desirable region. Specifically, the *Regional Plan* defines open space as:

“... publicly or privately owned, undeveloped land or water, intended to be preserved for agricultural, forest, community form, ecological, historical, public safety, or recreational purposes. It consists of lands for natural resources, agriculture, recreation, environmentally sensitive areas, hazard prone lands, cultural landscapes, natural corridors and trails and preservation areas for potable water and waste/ resource management.”

The following five themes define the importance of open spaces in the HGNP:

- » Ecology
- » Working Landscapes
- » Community Shaping
- » Outdoor Recreation
- » Cultural Landscapes

These themes highlight the multiple functions that open spaces provide and capture the importance of open spaces to the ecological, economic and socio-cultural vitality of the Region. These themes provide the overarching structure to ensure a comprehensive and holistic HGNP.

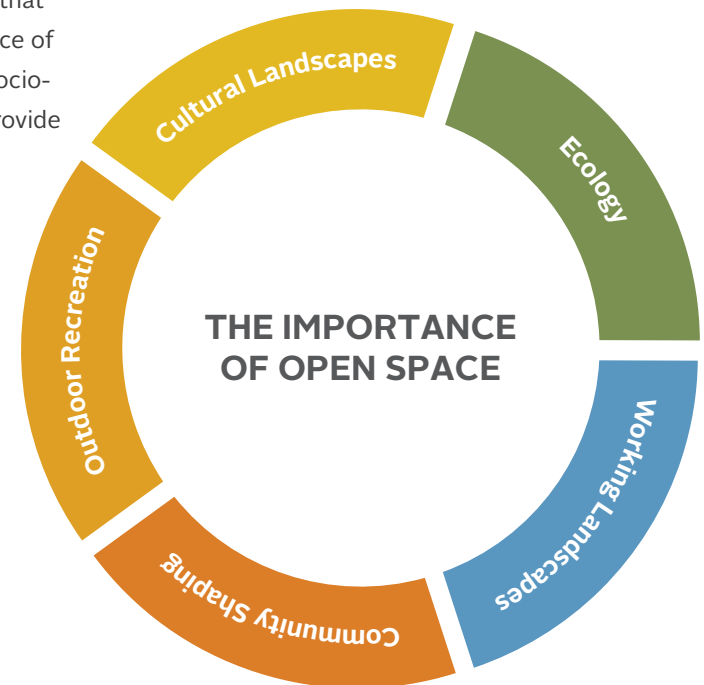


Figure 1: Five Themes

Ecology

Open spaces contain natural systems that support plant, animal and human life. Protecting open spaces in turn protects important habitats for terrestrial and aquatic species to ensure that the Region retains high biodiversity. Building and maintaining an interconnected network of open spaces ensures the protection of viable populations and ecosystems.

Trees, forests and other green elements found in open spaces not only provide valuable habitats, they also offer multiple quality of life benefits including improved air quality, noise and wind buffers, shade and beauty. Open spaces also protect soil, vegetation and land forms that facilitate water storage, purification and infiltration – all important functions for preserving water quality and reducing flood risk. Each of these benefits contribute to a clean, beautiful and healthy region.

Climate change remains a pressing concern, with Municipalities working to mitigate their greenhouse gas emissions and adapt to climate change effects. Open spaces can mitigate climate change by sequestering greenhouse gases in soils, wetlands and vegetation. They can also assist with climate change adaptation by creating favourable micro-climates and reducing flood risk. For these reasons and others, it is critical to retain healthy natural environments.

Working Landscapes

HRM's Green Network contains working landscapes that support diverse economic activities and employment, including natural resource extraction industries such as forestry and mining. Agriculture is also important throughout HRM at multiple scales, from large agricultural operations to community gardens. Increasingly, scenic landscapes, recreational spaces and cultural landscape features are recognized for their importance in supporting the tourist economy. These industries have a long history in the Region and continue to play an important role in its economy.

The HGPN recognizes the importance of working landscapes as open spaces within the Green Network. The Plan strives to balance the continued importance of natural resource extraction, cultivation and tourism opportunities with other Green Network values.

Community Shaping

Open spaces shape the settlement form and character of the Region's communities. Protecting open spaces helps to direct urban development to appropriate locations and creates clear neighbourhood edges.

Green spaces and complete streets also promote safe and comfortable communities by functioning as buffers between land uses and supporting a vibrant, comfortable public realm.

Outdoor Recreation

Open spaces are places for enjoyment, introspection, recreation, education and active transportation. They provide landscapes and facilities for sports, fitness activities and leisure pursuits, both active and passive. Residents can access open spaces for rejuvenation, well-being, active living and connecting to nature.

A well-connected trail system encourages outdoor recreation by allowing people to explore and travel throughout the Region using multiple modes (e.g. walking, rolling, snowshoeing, etc.) Providing numerous recreation experiences, from natural wilderness routes to paved shared-use paths, supports opportunities to explore the Region and travel between destinations.

An ecologically and economically sustainable network of parks improves community health while providing residents with multiple recreation options.

Cultural Landscapes

Open spaces connect people to local history and offer opportunities to celebrate the many cultures within the Region. Open spaces contain historic sites, archaeological sites and cultural landscapes that serve as educational tools and reminders of the past. An understanding of this historic and cultural evolution creates a sense of identity and allows communities to share their heritage with others.

1.3 CORE PLANNING CONCEPTS

The HGNP provides a balanced and comprehensive approach to conservation, growth and development – a balance that can be difficult to strike without a good understanding of how the landscape works. Specifically, this Plan identifies five core planning concepts that provide a framework to achieve this balance. These concepts will guide future open space planning and decision making.

Concept 1: Regional Landscape Planning

The HGNP is a regional landscape plan that informs more detailed community and site-specific planning. Regional landscape planning refers to the study of landscape patterns and natural processes across the Region. This allows planners to understand natural connections at a scale beyond a local project or development site. Before community and site-specific planning take place, an understanding of their role within the larger region is critical, in particular their role in larger ecological, working, community shaping, outdoor recreation and cultural landscape networks and patterns.

The Region is complex with multiple elements and processes interacting at multiple scales. To capture this complexity and support the HGNP, a comprehensive geospatial database of valued landscape elements, the Green Network Database, was assembled, mapped and analyzed at the regional scale (see Section 2.5 for an overview).

This Green Network Database supports further planning at multiple scales. Decisions made for a specific site can have profound implications for the broader regional landscape; for example, site-specific land use decisions may overlook regional connectivity for wildlife and recreation. The Green Network Database will allow planners to understand a parcel of land's role within the larger Region and take this role into consideration when making land use and open space policy decisions.

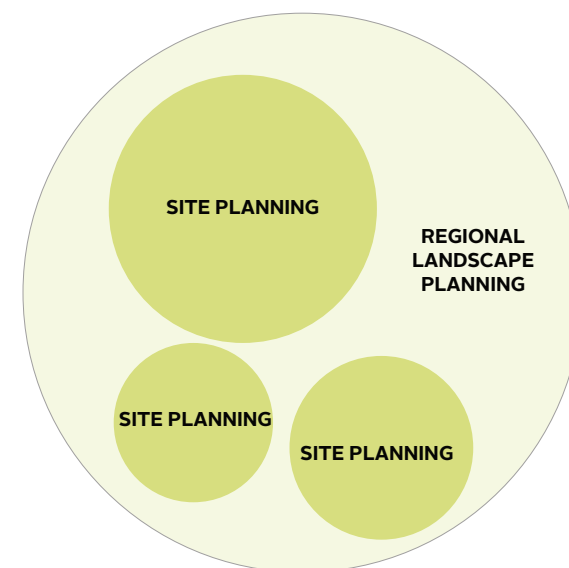


Figure 2: Regional Landscape Planning (Concept 1)

Concept 2: Community Shaping Landscape Patterns

Using landscape to shape communities requires defining the form of communities without disturbing valuable natural areas. This results in unique community design that defines local character and improves residents' access to natural areas. In practice, this results in different open space shapes, as described below.

Edges

The green network includes large naturally influenced areas and shorelines that contain and separate settlement areas. Maintaining these edges prevents settlements from blending together.

Wedges

Wedges are large natural landscapes that extend into settlement areas and provide connections to the broader natural landscape. These areas contribute to community character, offer opportunities to experience nature close to home and provide links to regional trail networks.

Patches

Patches are relatively small isolated areas of open space and water distributed within communities. These areas provide local natural and recreational amenities. Patches are, ideally, at least partially vegetated, situated within walking distance of residents and linked by corridors.

Patches include:

- » Parks, plazas and squares
- » Natural areas and wetlands
- » Schools and institutional grounds
- » Other public or private open space

Corridors

Corridors are linear open spaces that provide ecological connectivity, mobility connections and recreational opportunities throughout communities and the Region.

Corridors include:

- » Greenways (linear parks)
- » Natural urban corridors (including riparian areas)
- » Complete streets and main streets with an enhanced public realm
- » Major utility corridors

Cultural Landscapes

Cultural landscapes are places that connect the Region's residents and visitors to local history. Typically associated with a historic event, activity, person or group of people, they reflect human interaction with the land over time. Some of these areas are designated and protected, while others have yet to be officially recognized.

Cultural landscapes are an overlay applied to settled areas, natural areas or a combination of both. The impact of development within these landscapes need to be carefully considered to ensure the cultural value is protected.

The HGPN guides the shape of communities through open space patterns and cultural landscapes. This spatial and strategic direction provides a basis for *Regional Plan* revisions, further community planning and site-specific development decisions.

Implementing the green network, as defined in this Plan, will result in edges, wedges, patches, corridors and cultural landscapes to give each community a unique identity while maintaining the larger regional green network.

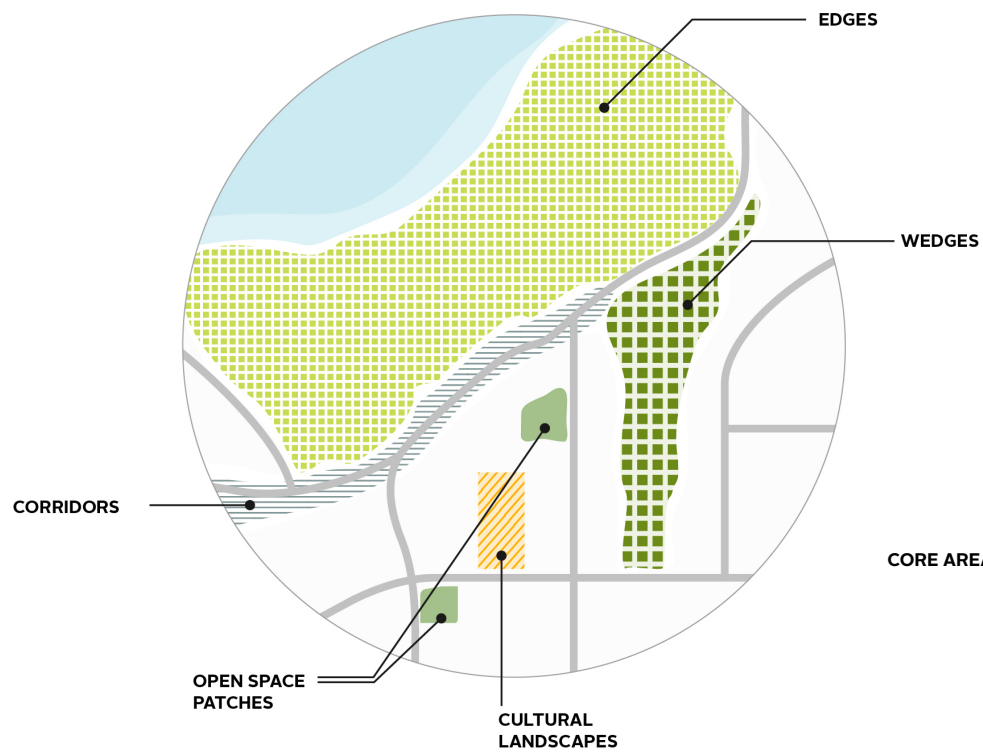


Figure 3: Community Shaping Landscape Patterns (Concept 2)

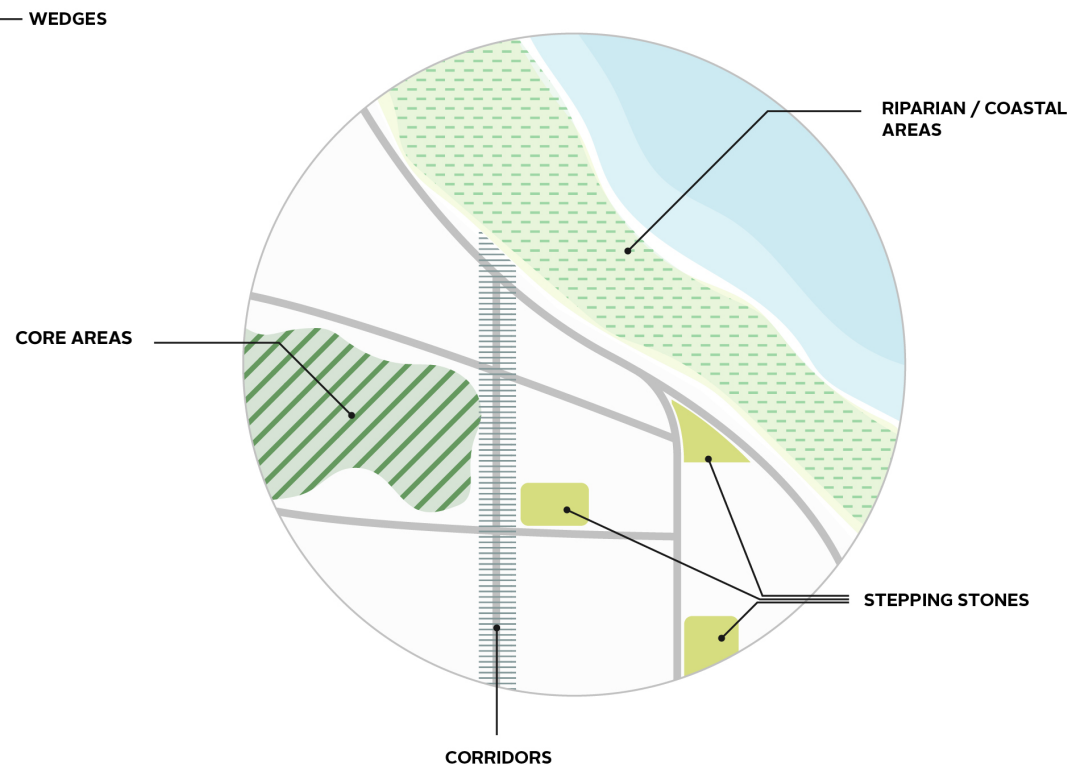


Figure 4: Ecological Landscape Patterns (Concept 3)

Concept 3: Ecological Landscape Patterns

Ecological landscape patterns are another type of open space pattern. But instead of shaping communities, these patterns support ecological health. Protecting these patterns helps species move between habitats and supports ecological flows (i.e. the movement of animals and genes from one place to another).

This concept supports regional planning, because where community growth and land-use planning can significantly alter landscape patterns these patterns provide an organizing framework for further community and site-specific planning.

The following landscape patterns are closely linked to important ecological processes and should be maintained throughout the Region.

Core Areas

Vegetated areas that are separate from human settlement. They support habitat and species diversity as well as natural processes such as water movement and nutrient-cycling. These areas also provide environmental protection and allow wildlife to move around urban areas.

Corridors

Areas that connect large patches and other landscape patterns in the form of wide corridors. They support natural processes and wildlife movement and often include important environmental areas and waterways.

Riparian/Coastal Areas

Vegetated corridors that also function as buffers along major streams, rivers and coastal environments. They support species movement, erosion control, water quality, habitat and natural processes.

Stepping Stones

Small natural vegetation patches distributed through altered landscapes. They support habitat, animal movement and natural processes.

Concept 4: Interconnected and Multifunctional Spaces

The HGNP provides an interconnected network of open spaces across the Region. The development of the Plan leverages the integrated and multifunctional nature of many areas, since there are few instances where open spaces do not provide multiple functions. For example, a single open space area can provide wildlife habitat and landscape connectivity, help shape communities, provide recreational opportunities and protect important water resources.

The chart on the following pages outlines the multitude of functions that open spaces provide, organized by each of the five theme areas: **Ecology**, **Working Landscapes**, **Community Shaping**, **Outdoor Recreation** and **Cultural Landscapes**.

ECOLOGY

Natural systems that support plant, animal and human life.



Biodiversity: Open spaces include habitat for terrestrial and aquatic native plants and animals to help maintain regional biodiversity.



Landscape Connectivity: The connectivity of habitats and ecological flows throughout the Region protects the long-term viability of species and ecosystems.



Water Management: Open spaces help protect source waters, reduce flood risk and encourage the recharge of aquifers by providing water storage, purification and infiltration.



Climate Change Adaptation: Open spaces help reduce the impacts of floods and heat waves by regulating stormwater runoff, stabilizing micro-climates, reducing wind effects and limiting urban heat island effects.



Climate Change Mitigation: Open spaces help capture, store and reduce atmospheric carbon over time, offsetting the Region's greenhouse gas emissions and limiting local contributions to climate change.



Air Quality: Open spaces improve air quality, reducing pollutants and noise levels by providing living buffers between activities.



Risk Mitigation: Open spaces can minimize environmental risks through processes like slope stabilization, floodway protection and repurposing contaminated sites.



Urban Forests: Trees contribute to a healthy and attractive community. They create shade, mitigate pollution, provide important habitat and increase aesthetic value.

WORKING LANDSCAPES

Open spaces that support economic activity.



Food Production: Open spaces provide opportunities for food production, e.g. community gardens, vegetable plots, farming and ranching, bee keeping.



Fibre Production: Large areas of the Region provide important fibre and woodlot opportunities.



Natural Resource Production: Aggregate and minerals are important to the Regional economy and are extracted in select locations.



Tourism: Cultural landscapes, recreational spaces, trails and scenic byways support an economically important tourism sector. Open spaces also function as tourism destinations and “unspoiled” landscapes support eco-tourism.



Waste Management: Waste management in open spaces include landfills, brownfield site reclamation and composting, recycling and biofuel facilities.

COMMUNITY SHAPING

Places we live, work and play.



Community Shaping and Identity:

Open spaces and landscapes can define community edges, shape desired and sustainable settlement and development patterns, and contribute to a sense of place.



Community Building and Celebration:

Open spaces act as gathering spaces. Spaces created and/or managed in partnership with citizens and organizations can foster a sense of identity and ownership. Public open spaces also provide opportunities for festivals, fairs and civic celebrations of all sizes.



Aesthetic Quality: Well-designed parks, greenways and public spaces, together with natural scenery, create stimulating and beautiful communities and contribute to cultural and natural heritage.



Public Comfort and Safety: Green spaces and green streets moderate temperatures and provide shelter. Trees and open spaces also support public safety by contributing to a vibrant public realm and providing transitions between land uses. Well-designed open spaces can help create safer streets for pedestrians, cyclists and drivers.

OUTDOOR RECREATION

Places we go for fun, engagement with nature and active living.



Recreation: Open spaces can accommodate active and passive activities, such as sport, running, rolling, paddling, walking and nature observation.



Health + Wellbeing: Open spaces facilitate active living, provide access to fresh air and nature, and foster well-being through outdoor contemplation and social connection for people of all ages and abilities.



Active Transportation: Well-connected, high-quality trails and pathways encourage active transportation modes like walking and cycling, providing more sustainable transportation choices.



Learn and Play: Open spaces provide unique opportunities to learn about the environment, culture and heritage. They are also integral to lifelong mental, social and physical development.

CULTURAL LANDSCAPES

Places that connect us to history and define regional identity.



Cultural and Historical Significance:

Cultural landscapes create a sense of identity and place. They connect the past with the present, help us understand cultural evolution and natural heritage, provide community character and represent a resource for economic development through tourism.



Indigenous Significance: Indigenous Peoples have played a fundamental role in the evolution of the Halifax Region's cultural landscapes. Mi'kmaq place-names, sites and artifacts help us to better understand pre-contact unwritten history. The Mi'kmaq concept of Netukulimk, which celebrates the cultural and spiritual connection between the natural and human environment, provides a valuable perspective on the importance of balance between conservation and development.

Concept 5: Community Resilience

Community resilience refers to the ability of the Region to survive and adapt to environmental, economic or social shocks. While community resilience requires a multi-disciplinary approach, the HGNP addresses how open space can contribute to community resilience by buffering communities from environmental, economic and social disruptions.

For example, open spaces play an increasingly important role in climate change adaptation. They help cool the ambient air temperature, absorb storm water run-off and shelter coastlines from storm surges. The HGNP supports strategies that moderate environmental impacts and provide conservation-based solutions for adapting to climate change.

Open spaces also help build economic resilience both directly and indirectly. Directly, open spaces accommodate working landscapes for activities such as resource extraction, agriculture and tourism. The protection, programming, planning and maintenance of open spaces also provides jobs. Indirectly, open spaces create attractive and healthy communities to live, invest and work in.

Open spaces also improve the physical, psychological and social health of communities. Open spaces provide areas of respite, public gathering and celebration. They also connect citizens to their history and culture. Lastly, open spaces improve livability and contribute to social cohesion, local identity and civic pride.

Together, these examples emphasize the important role open spaces play in building resilient communities. The strategies and actions of the HGNP support and expand upon other planning documents to address community resilience from these multiple perspectives.

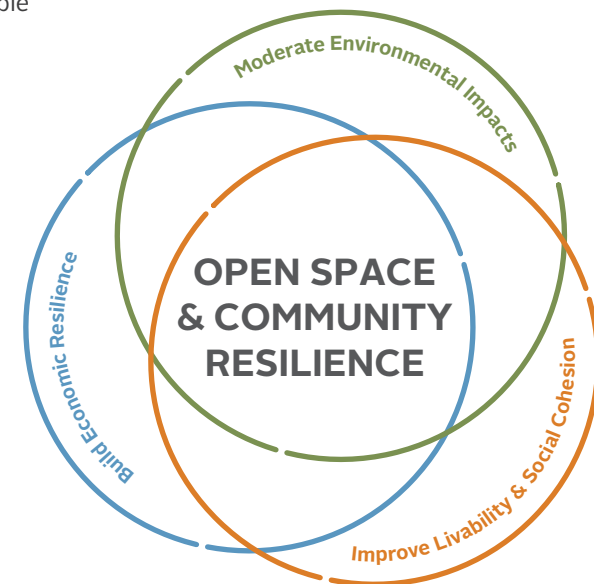


Figure 5: Community Resilience (Concept 5)

2 Background



2.1 STATE OF THE LANDSCAPE REPORT

Completed in 2015, *The State of the Landscape Report* identifies the key issues and opportunities that provide the background information and analysis that informed the HGNP. This report summarizes and analyzes the current state of the Region and its open space system based on the five theme areas. Specifically, it provides an inventory of existing open spaces along with a review of the elements residents care about and want to maintain in the future. The Report also reviews the biophysical, social, economic, historical and planning contexts that inform open spaces while identifying the key values, issues and opportunities that form the foundation of this Plan.

2.2 CULTURAL LANDSCAPE FRAMEWORK STUDY

The Cultural Landscape Framework Study, undertaken as part of the HGNP, provides background information on cultural landscape theory and practice. Specifically, the study establishes baseline data and recommends next steps to identify, conserve and manage cultural landscapes.

Engagement, carried out from May to November 2015, with approximately 560 participants, gathered feedback on cultural landscapes and associated issues, risks and opportunities. Participants identified over 400 places and cultural features that held social, cultural and historic significance for them and their communities; reflecting 10 categories of cultural landscape elements:

- » Indigenous Use
- » Ethnic Settlement and Re-settlement
- » Sites of Worship
- » Military Use
- » Transportation
- » Urban Landscapes
- » Natural Features
- » Regulated Heritage Sites
- » Archaeological Significance
- » Commemorative Site

In order to define cultural landscapes, the Study compiled these landscape elements into a database and map and grouped them into potential cultural landscapes based on their theme, era and clustering with one another. Based on further research and expert review, the Study identified 17 Priority Areas, as shown on the Cultural Landscapes Map (Map 12 on page 63).

The landscapes identified through the *Cultural Landscape Framework Study* are not a complete list of cultural landscapes in the Region, but rather a starting point to identify potential cultural landscapes and begin development of a comprehensive inventory. A full description of how cultural landscapes were identified and prioritized can be found in the *Cultural Landscape Framework Study*.

A program for the identification, conservation, management and celebration of cultural landscapes will be considered through the *Culture and Heritage Priorities Plan*.

2.3 PUBLIC & STAKEHOLDER ENGAGEMENT

Engagement with residents from urban, suburban and rural communities, the Province and stakeholder groups provided valuable insight to inform the vision, principles, objectives, and actions within the HGNP. Engagement took place over three phases:

- » **Phase 1** focused on understanding open space values, issues and opportunities while building a common vision for the Green Network.
- » **Phase 2** sought feedback on the initial directions of the HGNP, including the principles and theme areas.
- » **Phase 3** solicited input on proposed objectives and strategic directions related to each theme area as well as ideas for implementation.

This feedback helped guide and refine the content within the HGNP.

More information about the engagement process and outcomes can be found in the *What We Heard* reports produced for each phase.

The following summarizes key messages related to each theme area.

Ecology

Participants emphasized that diverse and healthy ecosystems provide a series of important services and benefits, such as provision (water, food, fiber, etc.), regulation (climate, water, etc.) and support for natural and built environments (habitats, water quality, etc.).

Working Landscapes

Participants acknowledged that working landscapes provide important economic development opportunities, while also emphasizing the importance of protecting viable ecosystems in the long term. They also advocated for the preservation of traditional land uses, food security and the ongoing viability of rural communities, which all depend on thriving working landscapes.

Community Shaping

Participants indicated that parks and open spaces contribute to a unique sense of place and help shape community identity and form.

Outdoor Recreation

Participants emphasized the importance of connected parks, wilderness areas and trails to provide a range of recreational and active transportation opportunities close to communities. This will help promote active lifestyles, contribute positively to quality of life and stimulate economic investment.

Cultural Landscapes

Participants emphasized that cultural landscapes, including their historical context and land uses, provide the foundation for a community's sense of place and identity.

2.4 RELATED PLANS

The open spaces of the Region include both public and private land. The plans, policies and regulations of the Provincial and Federal governments directly influence how the Region can accomplish its open space planning and land management objectives. Likewise, the HGNP implements the *Halifax Regional Municipal Planning Strategy (The Regional Plan, 2014)* and informs a wide range of Municipal planning decisions.

Provincial Plans, Acts, Strategies

The HGNP and the Province of Nova Scotia share a common goal to apply the principles of sustainable development to land-use planning and resource management. The Province has developed several strategies to support this goal, including *The Path We Share* (2011) and *Our Parks and Protected Areas* (2013).

Development activities and management efforts on Crown-owned land is the exclusive jurisdiction and authority of the Province of Nova Scotia. Advancing mutual objectives and implementing the objectives and strategies of the HGNP require collaboration between the Municipality and the Province. Specifically, Provincial legislation and regulations impact the implementation of the HGNP strategies and actions related to:

- » Natural and forest resource management
- » Biodiversity conservation
- » Parks and protected areas
- » Watercourses/waterbodies and wetlands
- » Marine aquaculture
- » Shorelines
- » Provincial transportation networks
- » Cultural and heritage planning

The Halifax Regional Municipality Charter

The *Halifax Regional Municipality Charter* is a Provincial statute that grants the Municipality broad authority and tools to enact Municipal policies and regulations. Important provisions that enable integrated open space planning and management include the power to control land subdivision, use and development. *The Charter* also enables the Municipality to acquire open spaces through the subdivision process or purchase.

Regional Plan (2014)

The *Regional Plan* is a Municipal planning strategy that provides policies that direct how the Region will develop and grow until 2031. It identifies open space planning and land management as a regional priority and provides overarching guidance for the HGNP. The HGNP aligns with the *Regional Plan* and advances multiple guiding principles, including:

- » Support development patterns that promote a vigorous regional economy
- » Preserve and promote the sustainability of cultural, historical and natural assets
- » Manage development to make the most effective use of land, energy, infrastructure, public service and facilities and foster healthy lifestyles
- » Ensure opportunities for the protection of open spaces, wilderness areas, natural beauty and sensitive environmental areas

Municipal Planning Strategies and Land Use By-laws

Municipal Planning Strategies and Land Use By-laws provide comprehensive planning policy and regulations for each of the Community Plan Areas in the Region, including specific direction and procedures to guide land use and open space development. The HGNP informs future updates to these plans and by-laws by delineating valued landscapes to protect from development and providing guidance for the creation of open spaces throughout the Region.

Priorities Plans

Priorities Plans provide actions to implement the policies of the *Regional Plan*. Several existing and proposed Priorities Plans reinforce and help implement the HGNP. These include the pedestrian and bicycle network envisioned by the *Active Transportation Priorities Plan* (2014), the preservation and enhancement of forests in the *Urban Forest Master Plan* (2012), and recreation delivery by the *Community Facilities Master Plan 2* (2016). *The Integrated Mobility Plan* (2017) also discusses active transportation networks and complete streets that complement the HGNP to support both mobility and Green Network goals. Lastly, the *Cultural Landscape Framework Study* completed as part of the HGNP will directly inform the *Culture and Heritage Priorities Plan*.

2.5 MAPPING THE GREEN NETWORK

To define and understand the Region's Green Network, valued open space elements for each theme were consolidated and mapped using Geographic Information Systems (GIS). The datasets that resulted from this analysis were inventoried and assembled into a comprehensive Green Network Database that the Municipality can use to inform future land use and open space planning.

When creating the valued open space elements maps (shown on the following pages), each location was assigned a value based on its importance to different landscape elements. These maps show areas with the highest values in terms of ecology, working landscapes and socio-cultural landscapes (community shaping, outdoor recreation and cultural landscapes).

The State of the Landscape Report and the *Cultural Landscapes Framework Study* provided a foundation for this work. The research summarized in these documents helped identify relevant datasets to create a meaningful picture of landscape value and define the criteria for determining whether an element is valuable. For example, the *State of the Landscape Report* explains that good quality habitat is important to sustain biodiversity and that undisturbed forests and wetland are more suitable than impermeable land cover (such as pavement or buildings). As a result, cities and other urbanized landscapes were assigned a lower value from a biodiversity perspective, which is reflected in the lower overall values shown in the Ecological Open Space Values (Map 1 on page 21) and the Summed Values (Map 4 on page 27).



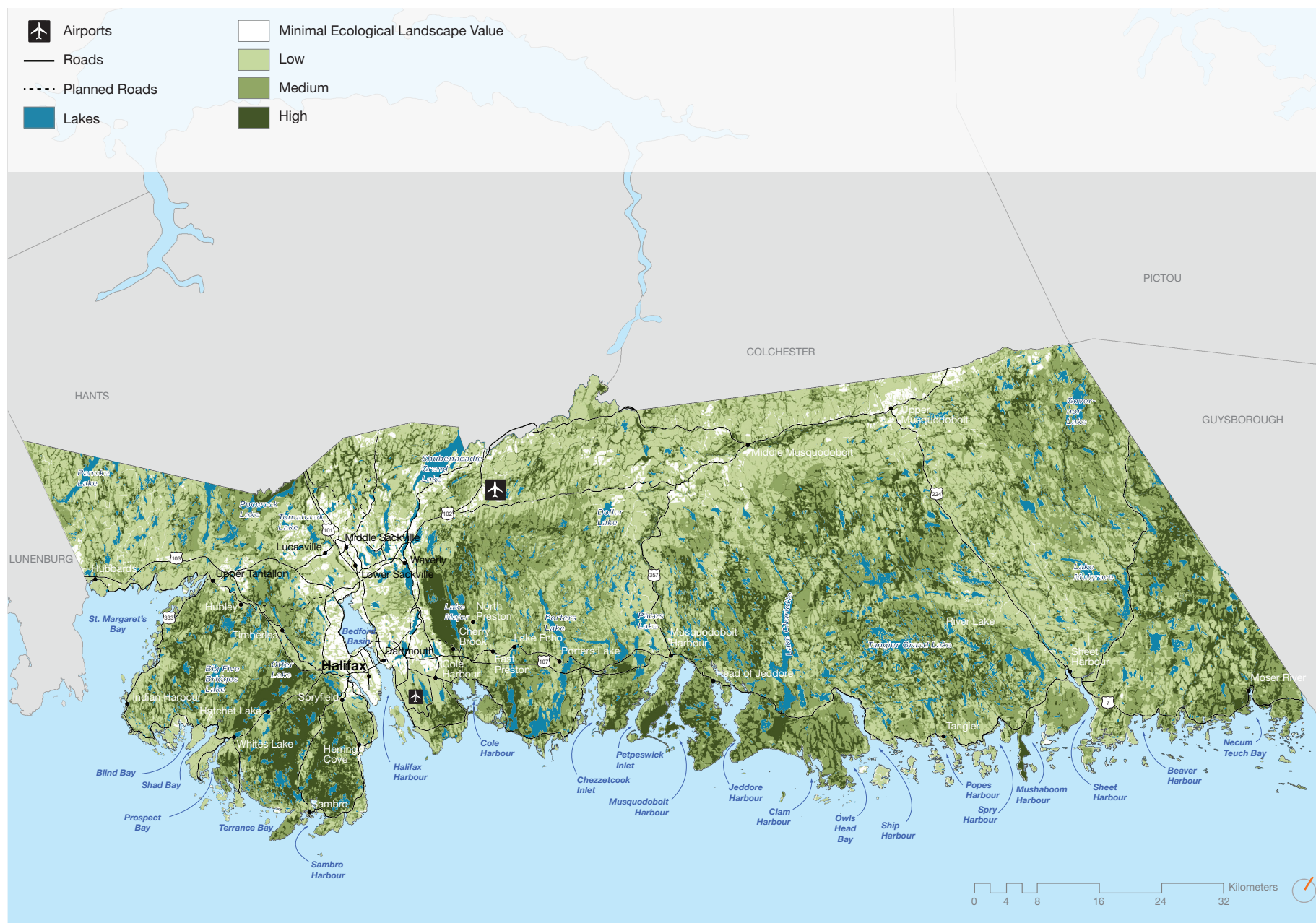


2.5.1 Ecological Open Space Values

The Ecological open space values include elements that make natural areas healthy and diverse. Twenty-four elements were mapped, including areas of important biodiversity, rare forests, natural patches, wetlands, surficial geology and riparian areas. Each element was assigned a value based on their importance to healthy ecological functioning. The values were then summed to give each area within the Region a total ecological value. This results in a map (Map 1) that highlights ecologically important areas in the Region, where the darker regions represent areas where more ecological values overlap.

ECOLOGICAL OPEN SPACE ELEMENTS

- » Important Biodiversity Areas
- » Jack Pine Barrens
- » Large Natural Patches (500-1000ha)
- » Large Natural Patches (1000-5000ha)
- » Large Natural Patches (>5000ha)
- » Mature Forests (>100 years old)
- » Rare Forest Patches
- » Existing Wells
- » Protected Water Supply Areas
- » Shallow Water Tables (<2m to surface)
- » Seawater Intrusion Zones
- » Surficial Aquifers
- » Tertiary Watersheds (containing Saltwater Wetlands)
- » Watershed with Low Human Footprint
- » Riparian Areas
- » Wetlands
- » Endangered Moose Habitat
- » Important Bird and Biodiversity Areas
- » Observed Species of Concern
- » Provincially Significant Habitats
- » Salmon Habitat (100m buffer)
- » Connectivity Pinch Points
- » Essential Connectivity Regions



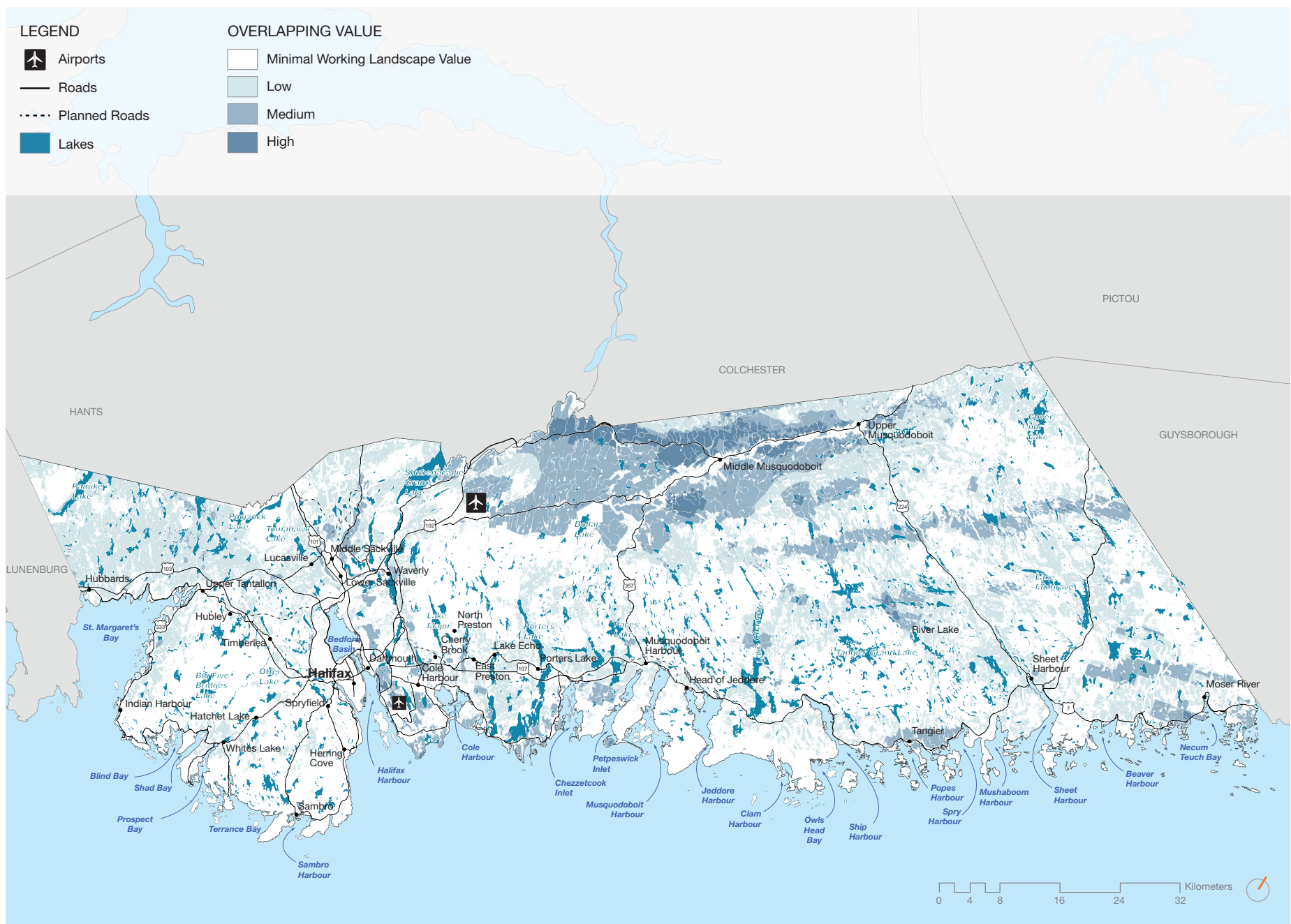


2.5.2 Working Landscape Open Space Values

Working landscapes support the Region's economy through activities such as natural resource extraction, agriculture and industrial development. Ten working landscape elements were mapped, including industrial harbour fronts, agricultural areas, resource extraction areas and major transportation routes. Like the ecological open space values map, these elements were assigned a value based on their importance to the Region. The values were then summed to give each area within the Region a total working landscape value, as shown in Map 2. The darker regions represent areas where more working landscape values overlap.

WORKING LANDSCAPE ELEMENTS

- » Aggregate Quarries
- » Mineral Leases
- » Industrial Harbour Areas
- » Major Transportation Routes
- » Future Transportation Routes
- » Utility Corridors
- » Agricultural Potential (Moderate)
- » Agricultural Potential (Moderate-Severe)
- » Softwood Capability (4.6-6.5m³/year)
- » Softwood Capability (6.6-8.5m³/year)



Map 2: **WORKING LANDSCAPE OPEN SPACE VALUES**

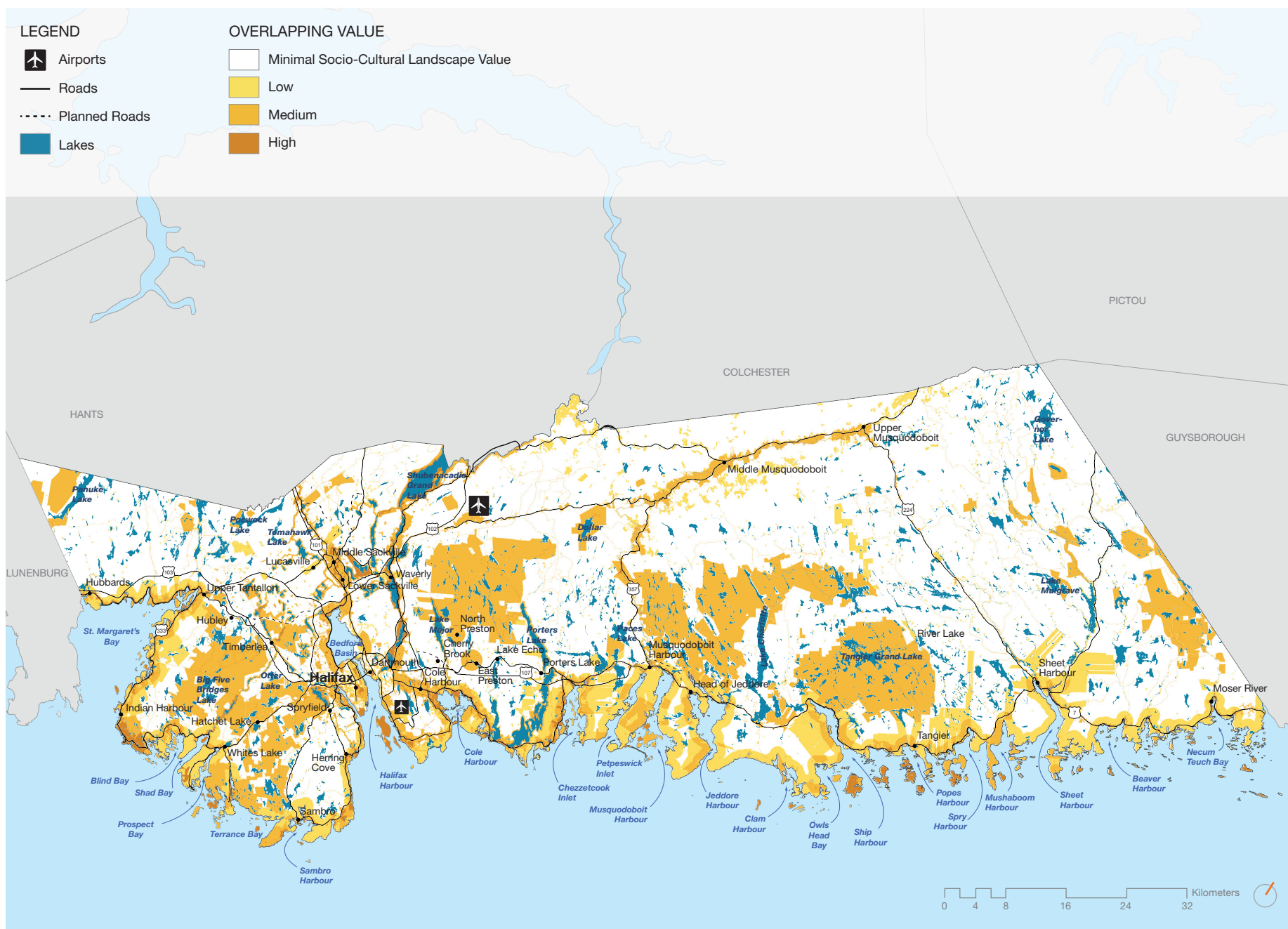


2.5.3 Socio-Cultural Landscape Open Space Values

Socio-cultural landscape open space values relate to community shaping, outdoor recreation and cultural landscape themes. In addition to important ecological and working landscape functions, open spaces facilitate exercise, exploration, relaxation, recreation, fun, historical appreciation, cultural pursuits and spiritual recharge. In total, 39 socio-cultural landscape elements were mapped. These elements were then assigned a value based on their importance to the Region. The values were summed to give each area within the Region a total socio-cultural landscape value, as shown in Map 3. Darker regions represent areas where more socio-cultural values overlap.

SOCIO-CULTURAL LANDSCAPE ELEMENTS

- » Areas of Archaeological Significance
- » Commemorative Sites
- » Culturally Significant Locations
- » Culturally Significant Viewsheds
- » Districts
- » Heritage Regulation Areas
- » High Potential Visibility
- » Historical Ethnic Settlements
- » Historical Indigenous Use
- » Significant Urban Landscapes
- » Sites of Worship
- » Edges (with development restrictions)
- » Edges (no development restrictions)
- » Land Trust/Easement
- » Near-Urban Natural Areas
- » Boat Facilities/Access
- » Coastal Areas
- » Inland Water Routes
- » Lakes
- » Waterscapes
- » Culturally Significant Landscapes
- » Culturally Significant Natural Features
- » Culturally Significant Natural Resources
- » Essential Urban Green Spaces
- » Estates and Gardens
- » Nature Reserves
- » Parks
- » Provincial Parks
- » Wilderness Area
- » Urban Forest Patches
- » ATV Trails
- » Culturally Significant Corridors
- » Culturally Significant Nodes
- » Culturally Significant Travelways
- » Trails
- » Transportation Corridors
- » Public Beaches
- » Publicly Accessible Shoreline
- » Military Use Areas

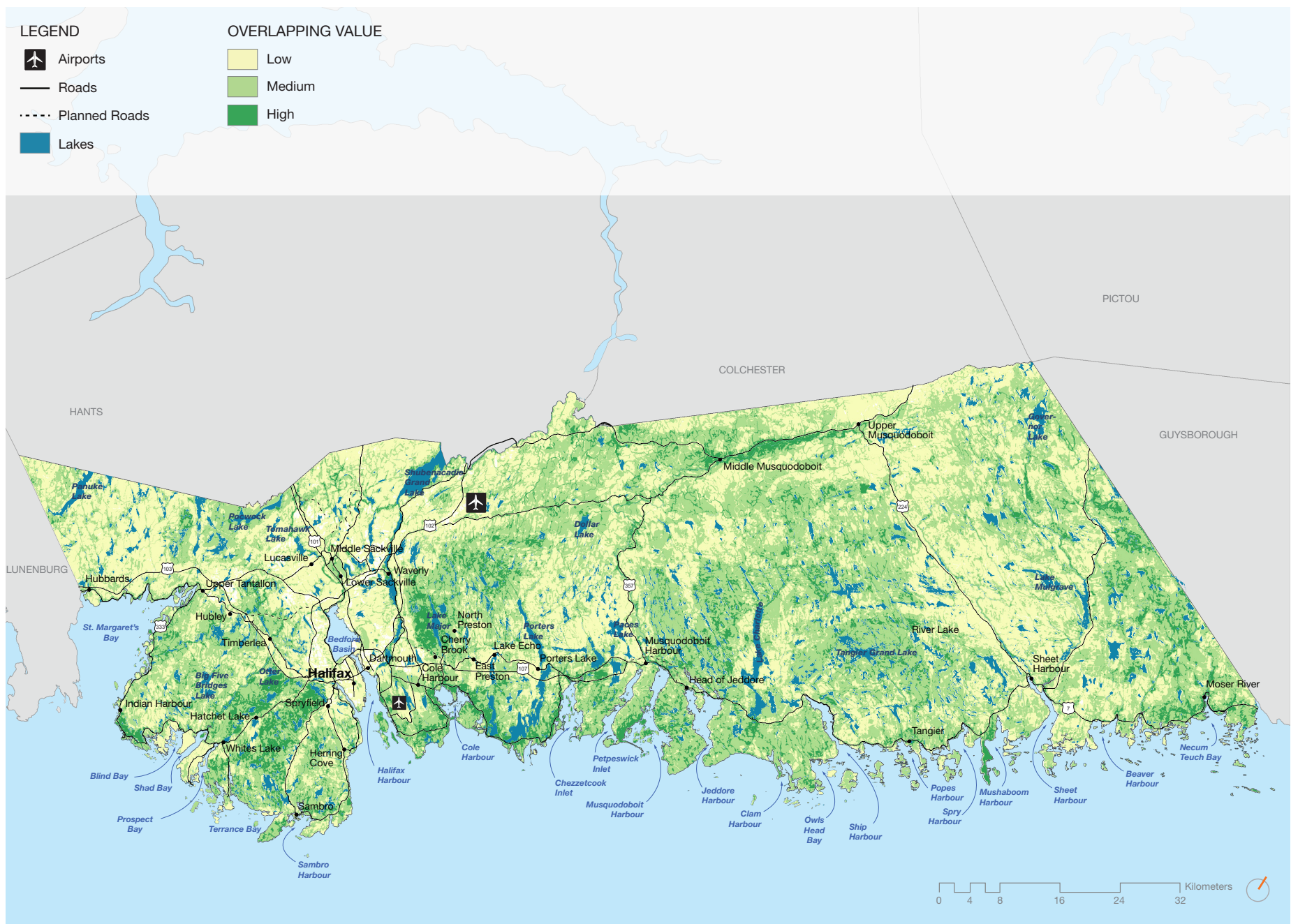


Map 3: **SOCIO-CULTURAL LANDSCAPE VALUES**



2.5.4 Summed Open Space Landscape Values

The three maps were then combined to create the Summed Values map (Map 4), which shows the areas with the highest open space values across all themes. This map recognizes the multi-functionality of open spaces and ensures a holistic approach to planning in the HGPN. Like the other maps, the darker regions represent areas of multiple overlapping values. However, it is important to note that the summed values map may not highlight unique features that take priority over other mapped items. For example, an area containing habitat for species at risk, which is essential to protect, may not show as a high value area on this map if the lands do not overlap with other valued features. Other factors such as proximity to urban areas and partnership or acquisition opportunities, are not captured in this analysis.



Map 4: SUMMED VALUES

3 Vision & Principles

This section contains the foundational statements that guide the HGNP's objectives and actions.

VISION FOR THE GREEN NETWORK

The Vision for the Halifax Green Network distills and defines the Region's open space aspirations for the future. It represents the ultimate outcome to achieve through the objectives and actions of the HGNP.

1

The Halifax Region will benefit from an **interconnected open space network** with multiple ecological, recreational, socio-cultural and economic functions to shape sustainable, resilient human and ecological communities.

2

The Halifax Region's open space success is rooted in **public involvement and multisector collaboration** to ensure long-term enjoyment, ecological stewardship and regional vitality.

3

The Halifax Region's open space will continue to offer citizens **healthy, productive, beautiful and enjoyable spaces** for future generations.

GUIDING PRINCIPLES

Eight guiding principles support the vision and inform the work of planners, Council members and other stakeholders as they implement the HGNP.

Interconnected

- » Link open spaces, physically and visually, across land and water.
- » Sustain and restore ecological functions.

Grounded in Science

- » Ground decisions in science, including conservation biology, landscape ecology and the social sciences.

Sustainable

- » Guide, shape and support complete communities.
- » Protect important ecological, cultural, recreational and working landscapes.
- » Conserve the unique landscape characteristics of the Region that support the economy.

Context Sensitive

- » Supply a diversity of open spaces to meet current and future needs.
- » Provide access to land and water tailored to local conditions.
- » Offer recreation and active transportation services that respects the unique cultural and ecological context of the Region while meeting specific citizen needs.

Stewardship

- » Ensure the long-term stewardship of open spaces as a vital community and regional asset.
- » Work with other levels of government, including First Nations governments and Indigenous organizations, to help advance matters of common open space interest.

Coordinated

- » Collaborate with citizens' organizations, private investors and landholders for more coordinated management and investment in public and private land.
- » Align with and shape plans and policies to ensure the HGNP is supportive, complementary and impactful.
- » Engage with citizens, including Indigenous Peoples and other under-represented ethnic groups on Green Network planning locally and regionally.

Inclusive

- » Distribute and manage public open spaces to provide opportunities for all residents to enjoy nature, cultural heritage and the outdoors within easy access of their homes and workspace.

» Versatile

- » Conserve an open space network with multiple environmental, ecological, recreational, cultural and economic opportunities and benefits.
- » Create a flexible and adaptable open space network that supports:
 - » Natural habitats and capital
 - » Source water protection
 - » Storm water management
 - » Agriculture
 - » Economic development
 - » Recreation and leisure
 - » Complete streets and greenways
 - » Trends in green infrastructure
- » Use the open space network to strengthen the Region's resilience and adaptability to climate change impacts, economic fluctuations and other changing conditions.



4 Green Network Objectives & Actions

The following section defines the objectives and actions required to realize the vision for the Region's Green Network. These objectives and actions will inform the procedures, partnerships and decision-making processes that will manage, improve and expand open spaces throughout the Region.

This section organizes the direction into five theme areas: **Ecology**, **Working Landscapes**, **Community Shaping**, **Outdoor Recreation** and **Cultural Landscapes**. These themes reflect the roles of open spaces throughout the Region and their impact on different systems.

Each theme area contains the following:

- » **Goal:** The overarching goal for the theme area
- » **Key Considerations:** The context and background information that inform the actions
- » **Objectives:** Topic-specific objectives that support the theme area goal and the overall HGNP vision
- » **Actions:** Specific and measurable actions that support each objective



4.1

ECOLOGY

The landscape of the Region contains a diverse range of ecosystems including Acadian forests, rock barrens, wetlands and coastal areas. These ecosystems provide important habitats and critical ecosystem services, such as providing a reliable supply of fresh drinking water and managing stormwater runoff. Managing these areas requires balancing ecological protection with human activity to ensure that key areas are protected and the benefits of natural ecosystems are maintained.



4.1.1 Goal

Support a healthy and sustainable natural ecosystem.

4.1.2 Key Considerations

The Green Network Ecology Map

Map 5 identifies areas that are central to the Green Network and the health of ecosystems in the Region. These include:

- » **Parks and Protected Areas:** Land formally designated for open space protection by Municipal, Provincial or Federal governments.
- » **Proposed Protected Areas:** Areas designated for protection by the Provincial government as outlined in the Nova Scotia Parks and Protected Areas Plan.
- » **Regulated Areas:** Riparian buffers, large wetlands and wetland complexes and other land protected from development by Municipal or Provincial regulations.
- » **Areas of High Environmental Value-Overlap:** High-valued areas whose loss would have a detrimental impact on ecological integrity.
- » **Core Areas:** Large, well-connected patches of natural vegetation and wildlife habitat surrounded by more altered landscapes. These patches provide essential functions, including the protection of biodiversity, soil and water. Reducing the size of these core areas could lead to substantial impacts and loss of overall regional landscape function.

» **Corridors:** Two types of natural corridors:

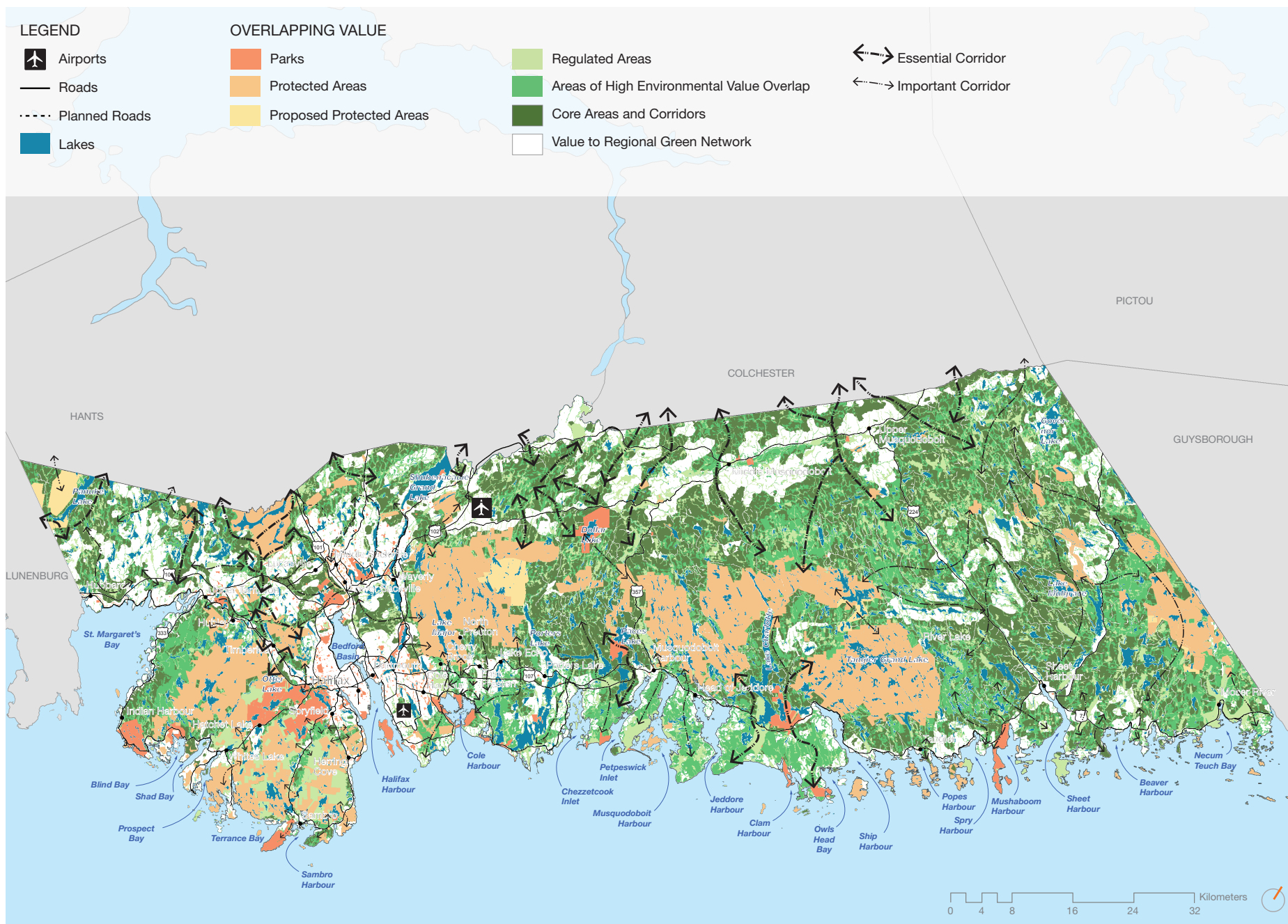
- » **Essential Corridors** are connections that provide unique or critical connections between important core areas, the loss of which would severely degrade connectivity throughout the Region and to adjacent Municipalities.
- » **Important Corridors** are connections between natural habitats, the loss of which would impact local connectivity but are unlikely to impact overall regional connectivity.

Landscape Connectivity

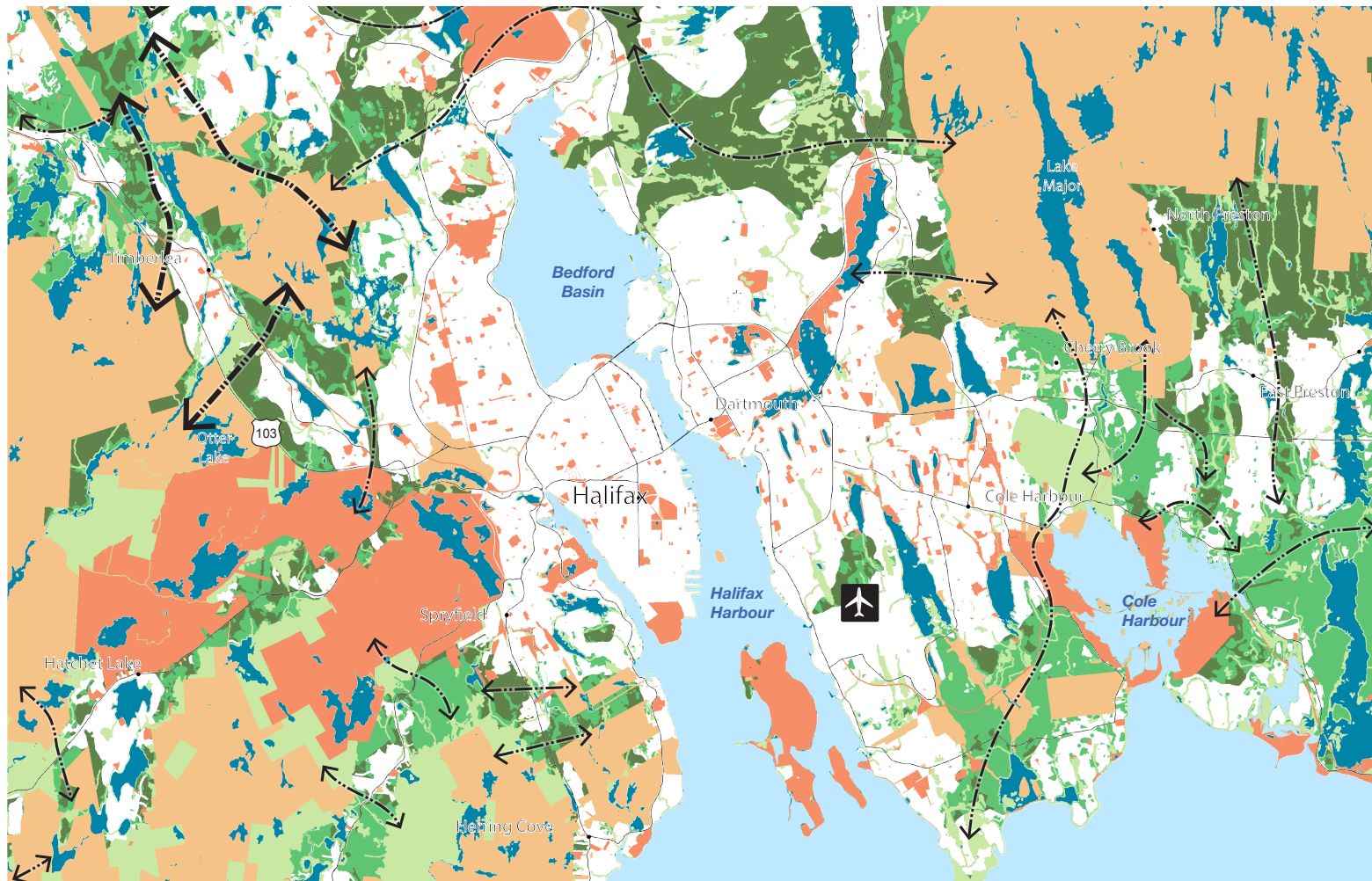
Healthy and diverse wildlife populations require connected habitats to move through when seeking shelter, food, water, space and mates. Essential and important corridors that connect habitats can be threatened, degraded or lost as a result of new development, natural resource extraction activities, increased presence of predators and competitors, highway expansion and the loss of vegetation in riparian areas. Significant degradation and loss can reduce or eliminate the opportunity for wildlife movement. Wildlife populations close to urbanized areas are particularly vulnerable.

Sensitive Landforms

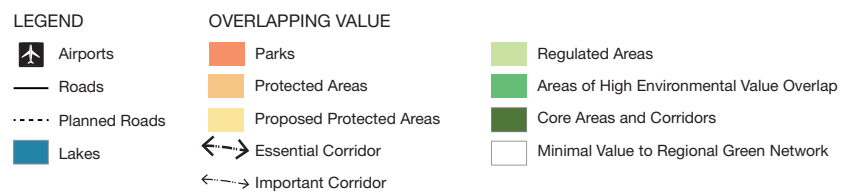
Sensitive landforms are vulnerable, delicate, rare or ecologically valuable land forms. Development and other disturbances in areas prone to erosion can decrease slope stability and increase sediment loading in rivers and streams. Natural areas typically contain a variety of sensitive landforms that contribute to the diversity, ecological function and aesthetic value of the landscape.



Map 5: **GREEN NETWORK ECOLOGY MAP**



Map 6: GREEN NETWORK ECOLOGY MAP (ZOOMED INTO THE URBAN CORE)



Water Quality and Quantity

Responsibly managed natural landscapes are important to protect water quality and quantity. Healthy ecosystems, especially wetlands and riparian areas, filter sediments, nutrients and pollutants from water before it enters rivers and lakes. Small and large natural landscapes also facilitate the absorption of water into the land, which reduces stormwater runoff, filters pollutants and replenishes ground water supplies.

The protection of drinking water is regulated by Nova Scotia Environment (NSE), which issues approvals for the construction and operation of water treatment and distribution facilities. One of the conditions of these approvals is that a Municipality or Water Utility must develop a Source Water Protection Plan for their drinking water source area. In addition to developing and maintaining a Source Water Protection Plan, the areas surrounding Halifax Water's drinking water sources were also designated as Protected Water Areas (PWA) pursuant to Section 106 of the Environment Act. These lands are generally maintained in a forested state to limit impacts on water quality. As protected green spaces, these areas form core open spaces that also contribute to Regional connectivity. Land use planning tools are also important to enhance the protection of drinking water by managing risks from development, requiring ground water supply assessments and protecting riparian areas that drain into protected lakes and rivers.

Stormwater runoff is also regulated by NSE, which requires new development to manage downstream surface water runoff. The responsibility for managing stormwater is complex and shared between Halifax Water (who manages public retention facilities), the Municipality (who manages stormwater in public roads) and private land owners (who are responsible for managing stormwater on private property). Current stormwater regulations focus on quantity and do not include water quality standards. Managing both the quantity and quality of stormwater requires the retention of natural systems and the implementation of sustainable approaches to manage excess run-off, filter pollutants and provide space for plant and animal life.

Riparian Areas and Wetlands

Riparian areas along the edges of lakes and waterways have multiple functions. Vegetation can stabilize banks, prevent erosion, slow and filter stormwater, provide habitats and contribute to continuous, interconnected wildlife corridors. These functions may be compromised if riparian areas are narrowed, degraded or destroyed.

Wetlands, including coastal wetlands, contribute to ecosystem health by providing important habitats for plant and animal species. Wetlands also remove excess nutrients and contaminants from water and provide water storage areas that moderate the impacts of droughts and floods.

Wetlands and riparian areas form natural buffers during extreme weather events, decreasing the likelihood and severity of overland flooding and/or reducing damage to built infrastructure along the coast.

The protection of riparian areas and wetlands is shared between the Province and the Municipality. Nova Scotia Environment regulates watercourse and wetland alterations. The Municipality, meanwhile, regulates development adjacent to watercourses and wetlands and can discourage wetland alternations through zoning and other land use planning tools. While Municipal land use controls cannot prevent land owners from removing vegetation before development takes place, the Municipality does have the ability to adopt a by-law to manage tree removal and retain vegetation within riparian zones within serviced (water and sewer) areas.

Climate Change

The global climate is changing. While the pace and full extent of climate-related impacts are uncertain, the Region is expected to face rising sea levels, increased extreme weather events, more frequent storm surges and more intense precipitation throughout the year. Wildfires may also increase with higher temperatures and prolonged dry periods during the summer. A warming climate may also bring new pests and diseases (both native and invasive) that threaten plant and animal life.

While a multipronged response is needed, the Region's Green Network can help mitigate and adapt to the effects of climate change. The Green Network does this by removing carbon from the atmosphere through plants and soils, capturing emissions that contribute to climate change. Intact and healthy ecosystems also increase the Region's resiliency to climate change by buffering storm surges and flood events and increasing the Region's capacity to accommodate new ecological pressures such as changes in species' ranges.

The Urban Forest

The urban forest includes all the trees found in urban communities, including public parks, streets, trails, natural areas and private land. Urban trees not only provide habitat and support biodiversity, they also remove pollutants from the air, provide shade, moderate strong winds, store carbon and nutrients, reduce traffic noise, add beauty and enhance the character of communities. Urban forests, including street trees, also help to manage stormwater by slowing overland flows and soaking up precipitation that would otherwise enter the stormwater system.

The 2013 Urban Forest Master Plan highlights areas that would benefit from more trees and areas where tree health could be improved. Proper management of the urban forest can help protect trees from developmental impacts, disease and pest outbreaks and severe storms.



4.1.3 Objectives and Actions

4.1.3.1. Maintain wildlife habitats, biodiversity and landscape connectivity.

Action 1: Refine and incorporate the Green Network Ecology Map (Map 5 on page 35) into the *Regional Plan* and use it to guide regional planning decisions related to the location and shape of:

- » Urban service boundaries
- » Rural centres
- » Nature parks
- » Conservation design developments

(More detailed direction is found within the Outdoor Recreation and Community Shaping Sections.)

Action 2: Consider the following design and management guidelines when planning, maintaining and restoring essential and important corridors (Map 5 on page 35) through Municipal Planning Strategies and Land Use By-laws:

- » Essential corridors should ideally be greater than 1km wide and composed of intact natural habitat, wherever possible
- » The width of essential corridors should increase in proportion to its length (i.e. the longer the corridor, the wider it should be)
- » Where a 1km width is not possible for essential corridors, maintain what remains, seek opportunities to restore disturbed areas and mitigate the impacts of nearby human activity

- » Maintain a minimum corridor width of 100m for important corridors to connect natural habitats
- » Where intact important corridors are unavailable and/or not possible to restore, maintain the largest possible remnant patches and encourage best management practices in intervening areas to provide opportunities for wildlife movement between patches

4.1.3.2. Conserve and manage steep slopes, easily disturbed soils and other land forms that are vulnerable to erosion and degradation.

Action 3: Amend Municipal Planning Strategies to clarify and ensure that environmental sensitive areas are identified and considered during the review of all discretionary planning applications (i.e. rezoning and development agreement applications).

Action 4: Amend the *Regional Plan* to emphasize the importance of identifying and protecting environmental sensitive areas during master neighbourhood planning exercises (secondary planning).

Action 5: Amend Municipal Planning Strategies and Land Use By-laws to consolidate environmental protection zones, which prohibit most forms of development, and apply these zones to areas with significantly sized vulnerable landforms, such as ravines and bluffs.

4.1.3.3. Protect riparian corridors and wetlands from degradation, pollution and other threats.

Action 6: Amend Municipal Planning Strategies and Land Use By-laws to consolidate, clarify and refine the Municipality's variable approach to watercourse buffers. Specific measures to consider include:

- » Consolidating environmental protection zones and applying these zones to sensitive riparian areas and wetlands, such as coastal marshlands, floodways and large wetland complexes, based on detailed mapping and analysis
- » Increasing the minimum required riparian buffer around drinking water supply sources, established under the Protected Water Supply Zone, from 30.5 to 100 metres
- » Establishing a consistent watercourse buffer requirement for industrial zones and uses, which currently range from 20 to 100 metres for some zones and specific uses
- » Increasing the standard watercourse buffer requirement from 20 to 30 metres for watercourses that are greater than 50 cm wide
- » Maintaining a watercourse buffer requirement of 20 metres for watercourses that are intermittent or less than 50 cm wide
- » Maintaining special watercourse buffering requirements established for vulnerable areas, such as the special requirements that apply to Cow Bay
- » Removing the formula to increase the buffer requirements based on slope for inland watercourses (not marine coast), as the requirement is rarely applicable and adds unnecessary complexity to the permitting process

4.1.3.4. Maintain and enhance the urban forest

Action 7: Continue to implement the *Urban Forest Master Plan*.

Action 8: Update the landscaping requirements in the Land Use By-laws to support the implementation of the *Urban Forest Master Plan* by prohibiting the use of invasive species.

Action 9: Consider the adoption of a private trees by-law to manage the removal of trees on private property within serviced (urban) areas. Specific direction to consider includes:

- » Focusing on large properties with development potential while minimizing impacts on small properties
- » Prioritizing the protection of trees and vegetation within the watercourse buffer
- » Developing an educational campaign to promote tree stewardship on private property

Action 10: When updating the *Municipal Design Guidelines* (Red Book) consider requiring developers to install street trees in front of developments located on existing streets that do not currently contain street trees.

4.1.3.5. Coordinate efforts to manage water quality and quantity while expanding the Region's Green Network.

Action 11: Work with Halifax Water and Nova Scotia Environment to establish stormwater management guidelines to improve the quality of stormwater runoff.

Action 12: Work with Halifax Water and Nova Scotia Environment to promote green infrastructure, such as naturalized stormwater retention ponds and bioswales, as the preferred approach to managing stormwater.

Action 13: Work with Halifax Water to develop a green infrastructure specification document to guide and promote the use of low-impact design approaches to manage stormwater on private property for multi-unit residential, commercial and industrial developments.

4.1.3.6. Prioritize the preservation of open spaces as a low cost and sustainable approach to both mitigating and adapting to climate change impacts.

Action 14: Continue to update the Region's flood scenario mapping and, through individual project work, prioritize the preservation and restoration of riparian areas and shoreline vegetation as an effective method for mitigating flood impacts.

Action 15: Consider Municipal efforts to protect and expand the Green Network when assessing Municipal contributions to mitigating green house gas emissions, including protection of land-based green carbon sinks and intertidal areas (e.g., saltmarshes) that act as blue carbon sinks.

4.1.3.7. Use the Green Network Database to inform future land use and infrastructure planning initiatives.

Action 16: Make the Green Network Database available to all Municipal departments, as well as freely available to the public through HRM's Open Data Catalogue.

Action 17: Explore opportunities to develop on-going partnerships with Provincial Government departments, universities and non-profits to refine, maintain and update the key datasets needed to understand the health of the Region's ecosystems, wildlife populations and wildlife movement corridors, including the spread of invasive species.

4.1.3.8. Work with the Province to expand the tools available to the Municipality to protect and manage the natural environment.

Action 18: Formally request that the Province amend the *Halifax Regional Municipality Charter* to enable the Municipality to acquire sensitive environmental lands (e.g. riparian areas, wetlands, steep slopes, etc.)

as an environmental reserve through the land development and subdivision process, in addition to existing parkland dedication provisions.



4.2 WORKING LANDSCAPES

Working landscapes are open spaces that support economic activity, such as resource extraction (e.g. mining, forestry), agriculture and tourism. These industries are important components of the Region's economy, especially in rural areas, and provide local resources for the Region's food, construction and manufacturing sectors. Well-managed working landscapes enable private land owners to benefit from their land holdings while contributing to natural landscape connectivity.



4.2.1 Goal

Support the sustainable use and management of the Region's natural resources.

4.2.2 Key Considerations

Provincial Jurisdiction

The Provincial government is responsible for managing many aspects of working landscapes. Forestry practices, for example, are regulated by the Department of Natural Resources and the development of quarries is managed by Nova Scotia Environment. The Province also has significant land holdings in the Region that it manages for forestry and other resource development. HGNP actions will focus on areas of Municipal jurisdiction, such as the development of homes and buildings, while recognizing the importance of building strong working relationships with key Provincial government departments.

Mining and Aggregate Extraction

The mining and aggregate extraction sector is a significant source of employment and economic activity in the Region and provides a local source of materials for road and other construction projects. While the Province manages mining and aggregate extraction operations, Municipal planning documents control the development of associated processing facilities, such as asphalt plants. Municipal controls related to housing in rural areas can also have a

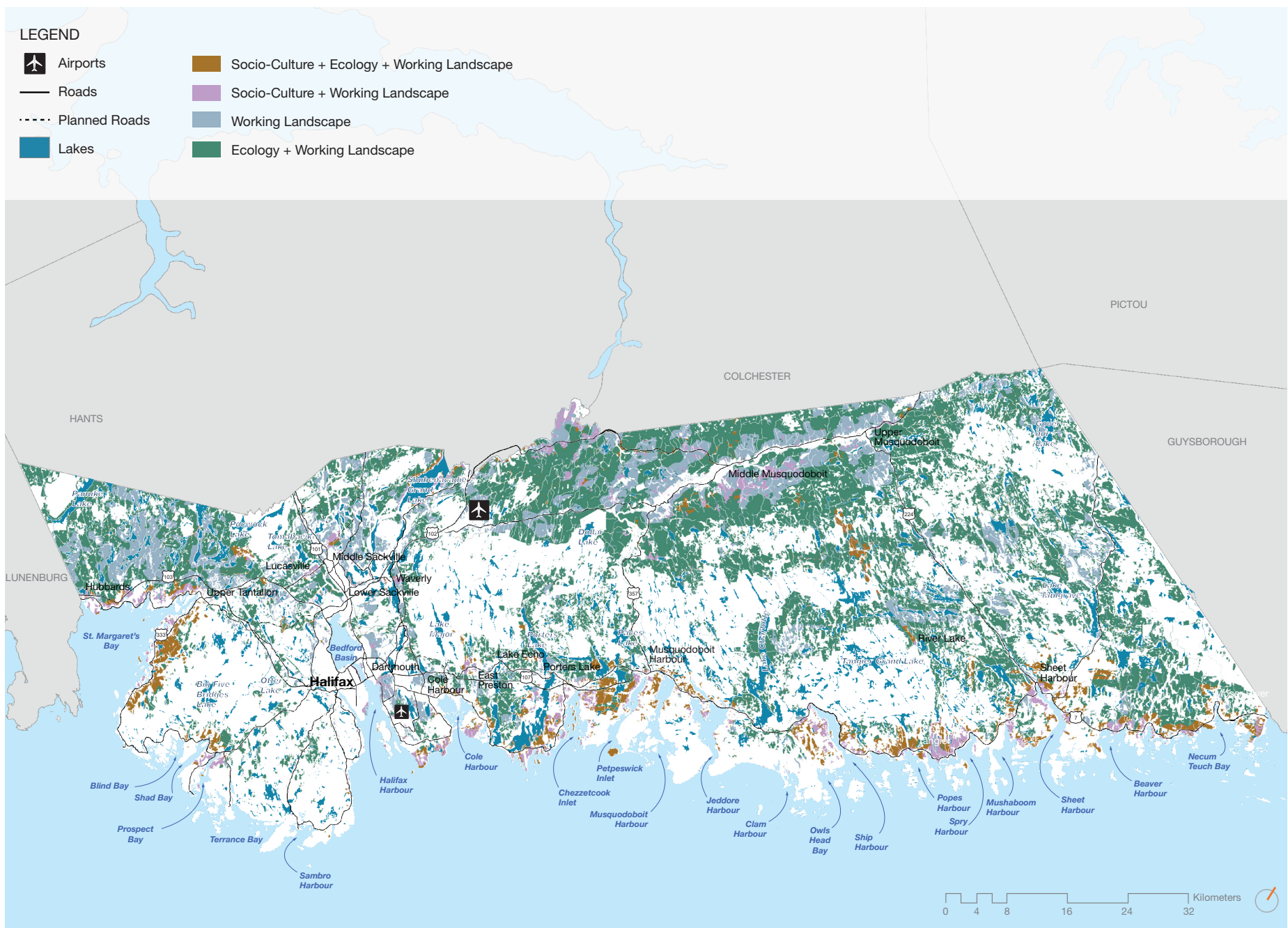
significant impact on the availability of appropriate areas to locate mining operations and related facilities.

Forestry

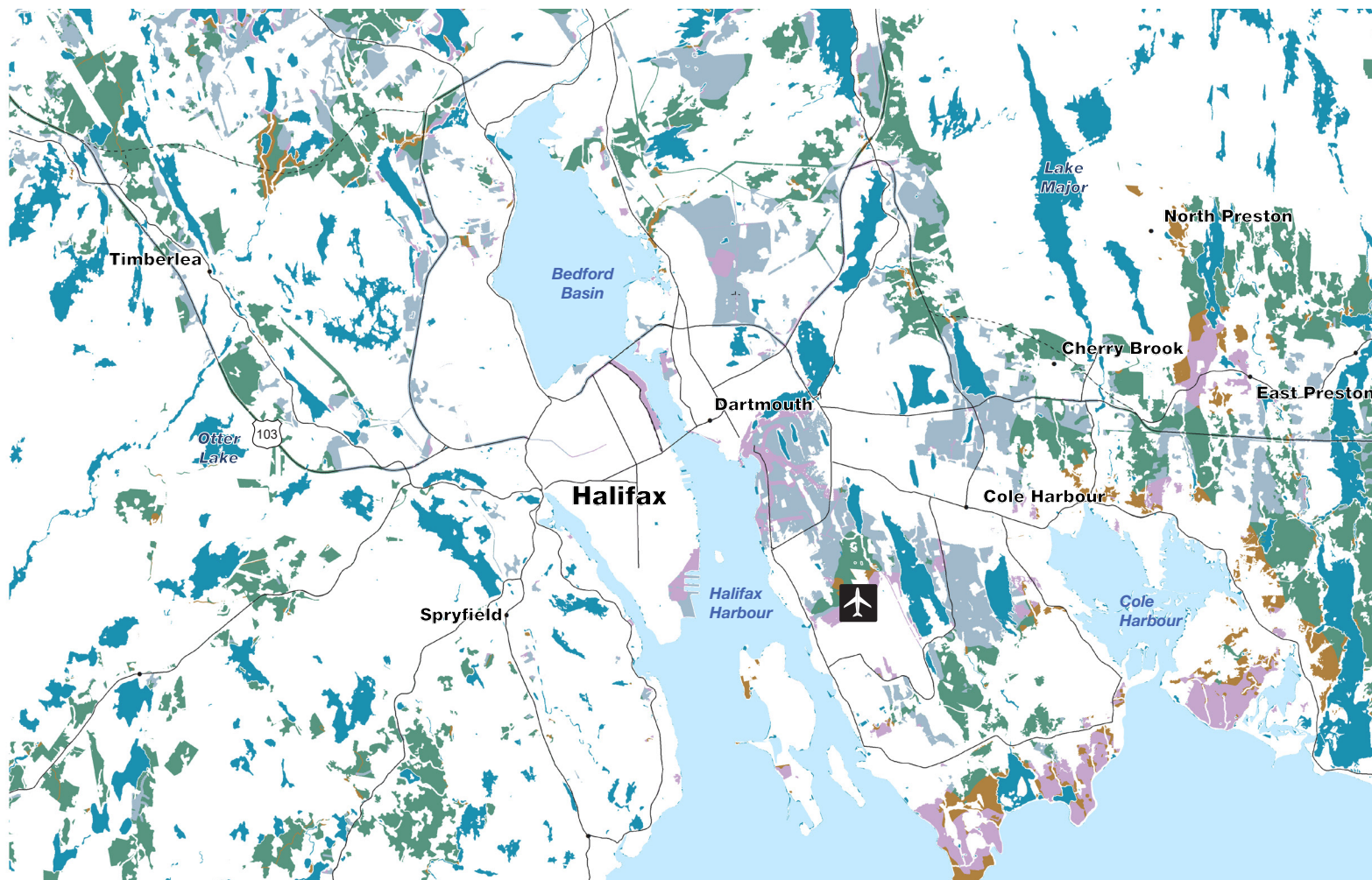
Forestry is an important economic activity in rural areas, particularly in the Musquodoboit Valley and Eastern Shore. The Municipality's involvement in forest management and harvesting is limited since the Provincial Department of Natural Resources is responsible for the management of forest resources on Crown lands and the regulations that apply to private wood lots. The Municipality, however, controls the development of forestry related processing facilities, such as saw mills, and plays a role in reducing potential land use conflicts with forestry operations by managing rural housing and cottage developments.

Agriculture

The Musquodoboit Valley is home to the Region's remaining area of high quality agricultural soils. Agriculture, however, within the Musquodoboit Valley and broader Region has declined since the 1960s due to the expansion of urban development and global economic trends. Farming in the Region is vulnerable as agricultural land is less costly to develop when there is demand for other uses, such as forestry, housing or industry. While there are few large agricultural operations in the Region, public interest in smaller scale agriculture, such as organic farming and urban agriculture, is increasing.



Map 7: **WORKING LANDSCAPES**



Map 8: **WORKING LANDSCAPES (ZOOMED INTO THE URBAN CORE)**

LEGEND

- | | |
|---|---|
|  Airport |  Socio-Culture + Ecology + Working Landscape |
|  Roads |  Socio-Culture + Working Landscape |
|  Planned Roads |  Working Landscape |
|  Lakes |  Ecology + Working Landscape |

Tourism and Scenic Resources

A strong tourism industry within the Green Network requires attractive and accessible landscapes with diverse recreational experiences and an engaging cultural heritage. However, the beauty of these landscapes can be negatively impacted by poorly designed and screened residential, industrial or commercial developments that distract from scenic routes and vistas. Underdeveloped tourism infrastructure, such as lodging, restaurants and recreational experiences, can also hinder efforts to draw visitors to an otherwise highly marketable scenic landscapes.



4.2.3 Objectives and Actions

4.2.3.1. Provide sufficient space and opportunities for resource extraction and forestry uses.

Action 19: Amend Municipal Planning Strategies and Land Use By-laws to direct residential uses away from areas suitable for resource extraction and forestry uses. (See the Community Shaping Section for more specific direction concerning rural centres and conservation design developments).

Action 20: Amend Municipal Planning Strategies and Land Use By-laws to provide more opportunities for uses that support primary resource industries, such as aggregate and wood processing facilities in locations with high value working landscapes (Map 7 on page 43). Specific measures to consider include providing as-of-right development opportunities (without a lengthy rezoning or development agreement process) for resource developments that locate in areas that are buffered from nearby residential areas, wildlife corridors and core areas shown on the Green Network Ecology Map (Map 5 on page 35).

4.2.3.2. Protect and promote the sustainable use of high valued agricultural lands.

Action 21: Amend the *Regional Plan* to limit or prohibit conservation design developments in the Agricultural Designation.

Action 22: Amend Municipal Planning Strategies and Land-Use By-laws to encourage agricultural developments and supportive uses to locate and expand in agricultural areas. Specific measures to consider include:

- » Ensuring setback and separation distance requirements are reasonable and do not unduly restrict the development or expansion of processing facilities or agricultural structures
- » Reducing the size and extent of non-agricultural uses in agricultural areas to limit the loss of high quality soils to non-agricultural developments
- » Ensuring permitted agricultural-related uses are inclusive of changing business practices and opportunities

4.2.3.3. Provide greater opportunities for small-scale agriculture.

Action 23: Balanced with other open space uses, support community gardens and other forms of food production in public parks and other Municipally-owned properties.

Action 24: Amend Municipal Planning Strategies and Land Use By-laws to encourage small-scale agriculture on private properties. Specific measures to consider include:

- » Removing barriers to appropriately-scaled urban agriculture and food retail on private property including, road side stands and animal husbandry
- » When reviewing landscaping requirements, ensure that edible landscaping, such as fruit trees and herb gardens, are permitted types of vegetation

Action 25: Consider community gardens, fruit trees, and food supportive amenities, when preparing master plans for public open spaces.

4.2.3.4. Support eco-tourism and the protection of scenic landscapes

Action 26: Amend Municipal Planning Strategies and Land Use By-laws to ensure that rural industrial developments are adequately screened from scenic roads and trails.

Action 27: Review Municipal Planning Strategies and Land Use By-laws to maintain and, where needed, increase lot size and frontage requirements to prevent dense “ribbon development” along scenic routes located between rural centres.

Action 28: Amend Municipal Planning Strategies and Land Use By-laws to encourage both small- and large-scale tourism related uses in rural areas. Specific measures to consider include:

- » Relaxing restrictions for home-based businesses that cater to tourists, such as bed and breakfast operations, accessory cabins, tour operations, arts and crafts, farms stays, and commercial recreation (such as kayak rentals etc)
- » Where not already permitted, considering the development of large-scale resorts, campgrounds, spas and hotels by rezoning or development agreement in rural areas that balance tourism opportunities with impacts on the environment and nearby residents
- » Enabling the development of resource-based and eco-tourism opportunities, including fishing, wildlife viewing, hunting, agriculture and forestry focused tours and experiences



4.3 COMMUNITY SHAPING

Open spaces shape communities and contribute to a sense of place. By considering the Green Network, valued open spaces can help establish clear community edges, natural connections and focal points, while contributing to the health and sustainability of neighbourhoods.



4.3.1 Goal

Use the Green Network to guide the growth and development of communities.

4.3.2 Key Considerations

Urban Growth Management

One of the central achievements of the 2006 *Regional Plan* was the adoption of an Urban Service Area that for the first time established a clear urban development boundary. The Urban Service Area identifies areas where urban development (central water and sewer) is permitted and is key to controlling urban sprawl and unchecked subdivision development in rural areas. The current 2014 *Regional Plan* maintains the Urban Service Area as the primary tool for containing outward urban growth.

In addition to the Urban Service Area, the *Regional Plan* establishes the Urban Settlement Designation (Map 9 on page 51). This designation identifies areas that are currently serviced with central water and sewer or intended to be serviced within the life of the *Regional Plan* (2031). Looking further into the future, the *Regional Plan* also establishes the Urban Reserve Designation, which identifies areas that may be suitable for future urban development beyond the life of the *Regional Plan* (2031). Changes to the Urban Service Area, Urban Settlement Designation

and Urban Reserve Designations are significant undertakings and the *Regional Plan* emphasises the importance of considering both the need and fiscal impacts of any proposed urban expansions. The *Regional Plan*, however, does not currently highlight the importance of the Green Network in establishing these urban boundaries.

Urban Communities

While the Region's urban communities contain fewer natural landscapes, open spaces located within urban areas create community focal points, define neighbourhoods, create a sense of place and connect communities to the larger Green Network. While open spaces located within established neighbourhoods are largely set, the redevelopment of built-up areas provide opportunities to enhance open space connections. Similarly, the planning of new neighbourhoods and business parks provides opportunities to incorporate Green Network values into the community design.

Rural Centres

The *Regional Plan* identifies several rural centres based on historic development patterns, transportation connections and development opportunities. These rural centres are locations where development is clustered within and around existing built up areas to support local shops and services, maintain rural character and direct rural development away from more remote natural landscapes or resource lands. The *Regional Plan*, however, does not clearly define the size or

boundaries of these rural centres, which may inadvertently encourage development within core ecological areas and corridors.

Conservation Design Developments

Since 2006, the *Regional Plan* has permitted new large-scale rural housing developments only through the conservation design development agreement process. The conservation design approach is a creative form of subdivision designed to conserve open space and significant environmental features, such as wetlands, while clustering development in suitable areas. Development proposals seeking a conservation design development agreement are required to submit detailed ground water studies and site analysis reports. Conservation design developments are permitted in most rural areas, with larger scale and higher densities proposals only considered within identified rural growth centres. While existing conservation design development policies effectively conserve open space within proposed developments, there is little policy direction to consider broader regional landscape patterns and connectivity.

Linear Infrastructure

Linear infrastructure can significantly impact the landscape. Transportation corridors, such as 100 series highways, can create barriers to recreation networks and wildlife movements. Similarly, hydro and other utility corridors can negatively impact scenic landscapes and provide routes for wildlife pathogens and predators to move more easily

through otherwise intact natural landscapes. While linear infrastructure can have negative impacts on the Green Network, these can be reduced by providing wildlife crossing areas, contributing to active transportation networks and/or assisting in stormwater management.

Within urbanized areas, greenspaces alongside linear infrastructure can provide corridors for small animals and offer opportunities for trail links between parks. In addition to utility corridors, urban rail lines often include swaths of greenspace within relatively wide rights-of-way.

The Chebucto Peninsula

The Chebucto Peninsula is one of the Regions most important and vulnerable natural areas. Its large undisturbed patches of wilderness, broken only by the Highway 333 loop and Highways 306 and 253, provide regionally important habitats for a wide variety of species, from endangered moose populations to rare plants. While the bulk of the interior of the Peninsula is well preserved, protected by parks and wilderness areas, ribbon development along the major highways is a concern for both local and regional landscape connectivity.

The Chebucto Peninsula is largely disconnected from the mainland by Highway 103 and the associated expansion of both urban and rural settlements. This development has created a barrier to wildlife movement. The planned development of Highway 113, together with the multiple areas planned for

future urban development, may eliminate the few remaining natural corridors between the peninsula and the mainland. If concerted efforts are not undertaken to mitigate and avoid impacts to landscape connectivity, the functioning of the Chebucto Peninsula for wildlife and overall ecological health will be severely compromised.

Within the Chebucto Peninsula itself, wilderness connectivity has also been disrupted by road construction and development in several key areas near Provincial parks and protected areas. Old Sambro Road (Highway 333) runs north/south across the eastern portion of the Chebucto Peninsula presenting some significant barriers between natural areas. In addition, West Pennant Road (Highway 349), as well as development along East Pennant Road and Sambro Creek Road, separate Crystal Crescent Provincial Park at the southern tip of the Peninsula from the rest of the Peninsula's natural lands (Map 9 on page 51).



4.3.3 Objectives and Actions

4.3.3.1. Consider the Green Network when reviewing the location of urban development and service boundaries.

Action 29: Amend the *Regional Plan* to ensure that the Green Network map (Map 5 on page 35), is considered when reviewing changes to the Urban Service Area boundary, Urban Settlement Designation, Urban Reserve Designation, and when preparing Secondary Planning Strategies.

4.3.3.2. Preserve natural corridors and sensitive natural features when planning the development of new urban neighbourhoods and business parks.

Action 30: Amend the *Regional Plan* to clarify the purpose and scope of land suitability assessments, which identify vulnerable landforms and other ecological features, as base information needed to inform the design of new mixed-use neighbourhoods and business park developments.

Action 31: Amend the *Regional Plan* to prioritize the redevelopment of brownfield sites and other underdeveloped urban infill sites ahead of undisturbed greenfield sites.

4.3.3.3. Maintain and improve natural connections between the Chebucto Peninsula and Mainland Nova Scotia, as well as those within the Peninsula itself.

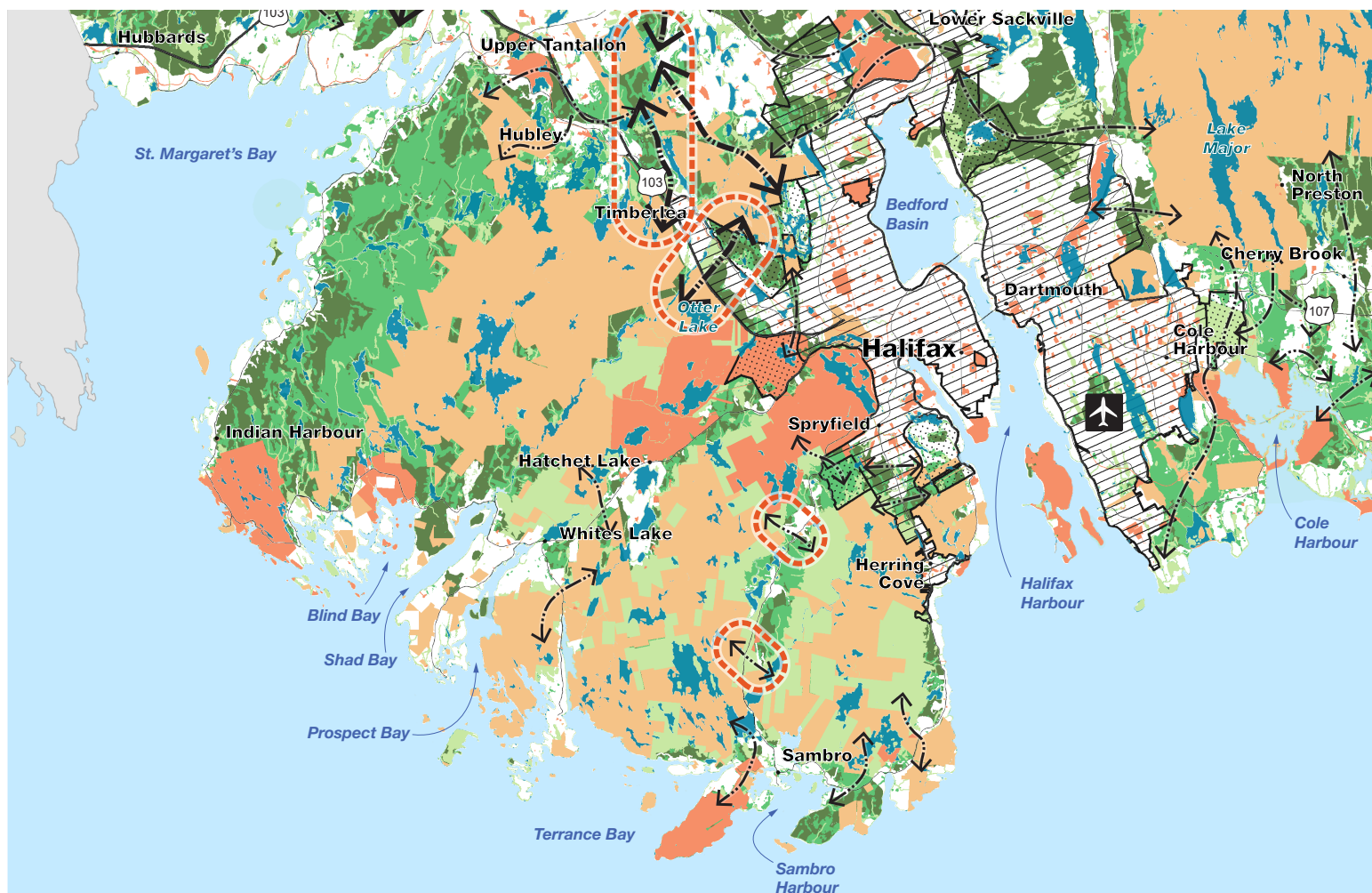
Action 32: Amend the *Regional Plan* and Municipal Planning Strategies to prioritize the preservation and creation of natural connections to the Chebucto Peninsula (Map 9) from the Mainland when reviewing development proposals and updating planning policies and zoning in the area. Specific connections to review and prioritize are highlighted on Map 9.

Action 33: Consider the preservation and creation of natural connections to the Chebucto Peninsula when planning the development of the Ragged Lake Business Park.

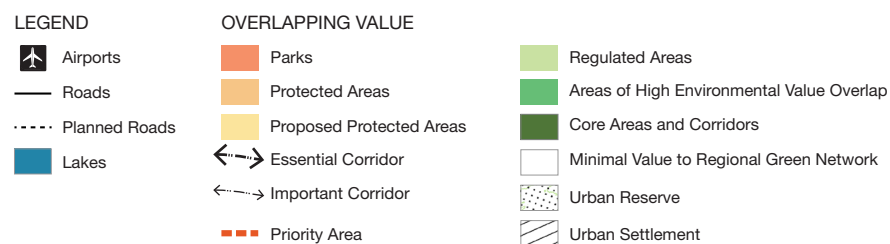
Action 34: Work with the Nova Scotia Department of Transportation and Infrastructure Renewal, as opportunities arise, to identify opportunities to construct wildlife crossings under Highway 103 and the planned Highway 113.

4.3.3.4. Encourage rural residential development to locate within rural centres.

Action 35: Amend the *Regional Plan* to better define the size, shape and location of all rural centres in relation to natural corridors and valued open spaces.



Map 9: GREEN NETWORK (ZOOMED INTO THE CHEBUCTO PENINSULA)



Action 36: Amend the *Regional Plan* by updating the conservation design development policies to streamline the planning process for proposed developments located within rural centres. Specific planning approaches to consider include:

- » Site plan approvals, which can direct development to suitable areas, without involving the lengthier development agreement process
- » Enabling as-of-right developments within carefully selected pre-zoned areas

4.3.3.5. Limit and carefully control rural residential development located between rural centres.

Action 37: Amend the *Regional Plan* conservation design development agreement policies to:

- » Further focus development within rural centres
- » Avoid conflicts with working landscapes
- » Direct development to the edges of the core areas shown on the Green Network Ecology Map (Map 5 on page 35)
- » Preserve the essential and important corridors shown on the Green Network Ecology Map (Map 5 on page 35)
- » Take a cautious approach to development within areas of high environmental value (Map 5 on page 35) by ensuring the underlying values are investigated and conserved and any impacts from development are mitigated

4.3.3.6. Consider opportunities to support the Green Network when constructing, repairing and developing transportation and utility corridors.

Action 38: Work with the Province and utility companies when opportunities arise to locate trails within existing and planned transportation and utility corridors.

Action 39: Work with the Province to mitigate the impacts on essential and important corridors and valued ecological open spaces when designing new regional transportation projects.

Action 40: Work with the Province to reconnect fragmented landscapes with crossing structures (wildlife overpasses and underpasses) when repairing or expanding existing roads and linear infrastructure.

Action 41: When updating the *Municipal Design Guidelines* (Red Book) consider and accommodate wildlife crossings when impacts on essential and important corridors cannot be avoided.



4.4 OUTDOOR RECREATION

Much of the Municipality's outdoor recreation service delivery takes place on our diverse network of public parks. These parks can be described as cherished parcels of land, defined by natural and human influences, that welcome people of all ages and abilities into its public realm to play, reflect and share their experiences.



4.4.1 Goal

Manage a municipal park network that meets the outdoor recreation needs of residents and visitors, supports ecological and cultural conservation, and shapes community form and identity.

4.4.2 Key Considerations

Healthy Communities and Well-being

A sustainable park system contributes to community health in many ways. Parks provide active and passive recreation opportunities and access to nature for people of all ages and abilities. They also foster spiritual well-being through respite, outdoor contemplation and socialization. Parks, especially those with sustainable wilderness areas, contribute to the resilience and connectivity of natural systems, which in turn supports healthier wildlife, air and water. In addition to being integral to mental and physical health, parks can also provide unique opportunities for people to learn about natural and cultural heritage. Parks increase livability and contribute to social cohesion, which supports overall community resilience.

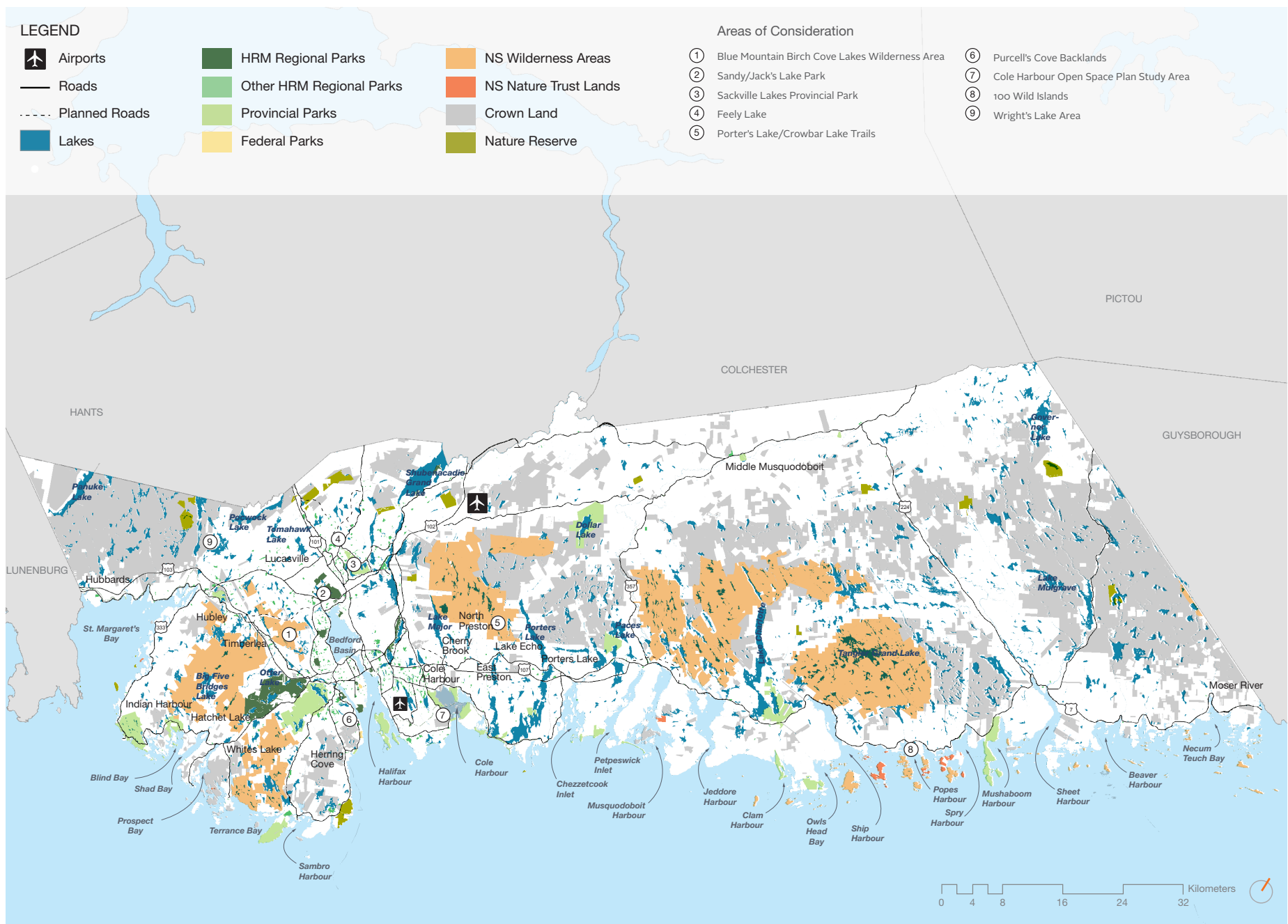
Context Sensitive Level of Service

Public institutions use level of service standards to plan and monitor the quality of service provided to their citizens. Defined levels of service set appropriate expectations for the public, administrators, staff, and city council. Levels of

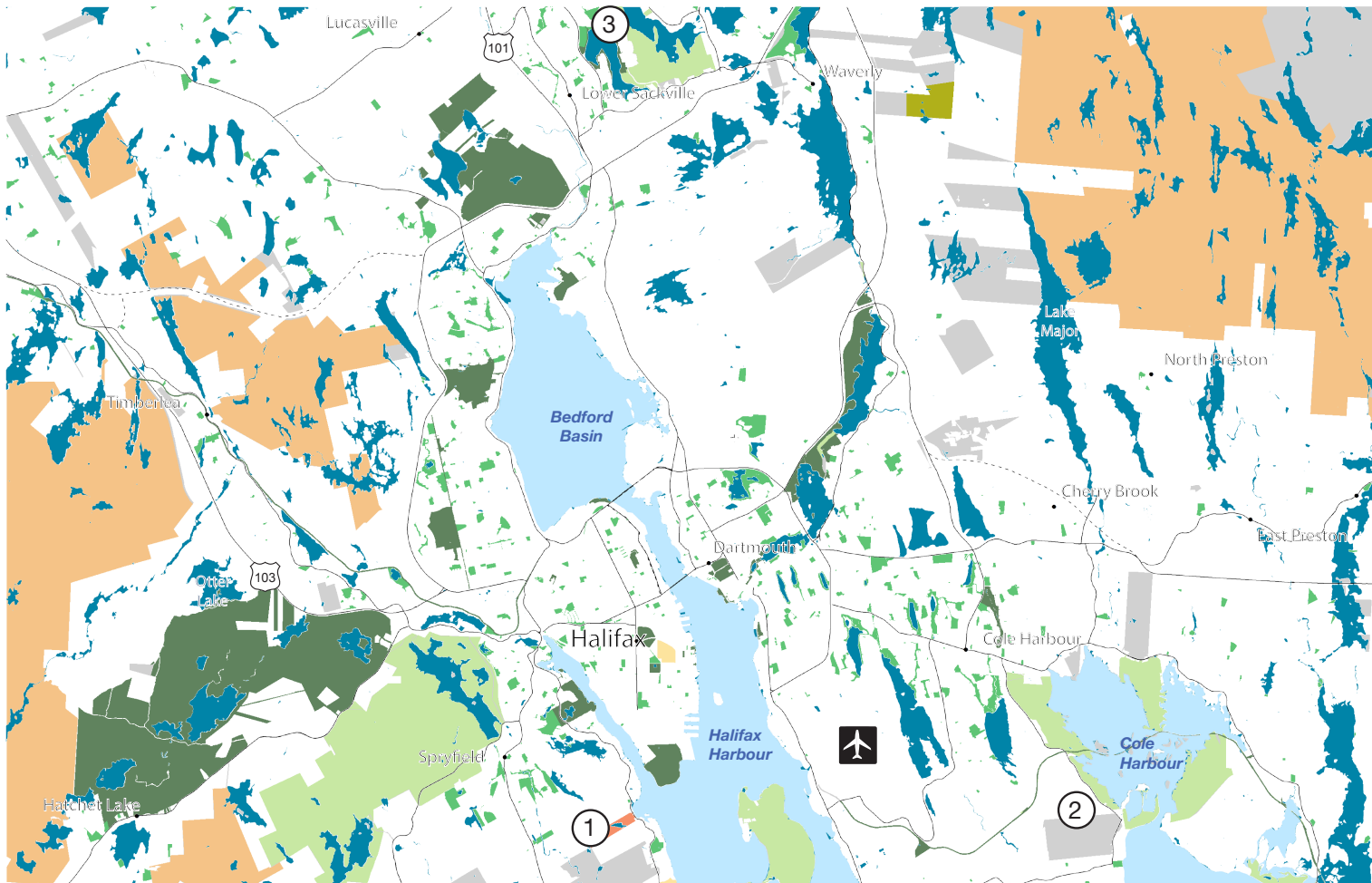
service can pertain to whether a service is provided or not, how much a service is provided, measure the quality of that service, or the required levels of investment in that service. Parks level of service analysis can be used in a variety of ways:

- » Help inform park planning research and analysis to validate park locations based on natural influences
- » Help to inform park planning research and analysis to determine the program need, size and distribution of new parks to accommodate projected growth
- » Help to inform park planning research and analysis to identify service overlaps and gaps
- » Shape policies to ensure developers contribute appropriately and predictably towards parks in land or built form contribution
- » Help community groups identify and articulate their outdoor recreation values, needs and priorities

Halifax's natural and human influenced landscapes help to organize the city into different settlement areas (Regional Centre, Urban Settlement (beyond the Regional Centre), Rural Commuter, and Rural), each one having distinct characteristics. Types of development and density of population differ greatly among the settlement patterns as do their natural resources, parkland and recreation facilities. Some have important natural features; others provide a wide variety of outdoor recreation opportunities. No individual community has a complete spectrum of outdoor recreation experiences. While physical variations may account for many of the differences in the settlements, the time that each neighbourhood became part of the city also plays a part. Different levels of parks and recreation service are required for each type of settlement pattern.



Map 10: **OUTDOOR RECREATION**



Map 11: OUTDOOR RECREATION (ZOOMED INTO THE URBAN CORE)

LEGEND

Airports	HRM Regional Parks	NS Wilderness Areas
Roads	Other HRM Regional Parks	NS Nature Trust Lands
Planned Roads	Provincial Parks	Crown Land
Lakes	Federal Parks	Nature Reserve

Areas of Consideration

- ① Blue Mountain Birch Cove Lakes Wilderness
- ② Sandy/Jack's Lake Park
- ③ Sackville Lakes Provincial Park
- ⑤ Porter's Lake/Crowbar Lake Trails
- ⑥ Purcell's Cove Backlands
- ⑦ Cole Harbour Open Space Plan Study Area

Fiscal Sustainability

HRM has over 900 parks, which equates to ~12 hectares of parkland per 1000 residents — more than double the Canadian municipal benchmarking average of 5.¹ This does not necessarily include all school grounds. In addition, our municipality has over 66,000 Ha of provincially and federally owned park and wilderness areas, and although not owned by HRM, these lands and associated recreational features provide for all residents and should be included in level of service analyses. With the intent of providing context-sensitive levels of service throughout HRM and the necessity of financial responsibility, assets that may be underused should be naturalized or divested, with financial resources directed towards other parkland.

While there may be a considerable amount of parkland throughout the municipality, in areas such as the Regional Centre, new growth is occurring where there may not be sufficient parkland or park amenities to serve new residents. Such development is typified by new high-rise development that does not include parkland dedication requirements to the municipality as no new subdivision lots are created. In addition, in the Regional Centre and generally throughout the Urban Settlement designation, new mixed-use community developments with relatively high densities are increasingly being proposed in HRM. The limited degree of subdivision that occurs may result in an inadequate dedication of parkland and park amenities.

Existing parkland dedication requirements are not necessarily sufficient to provide the quantity or quality of parkland to serve such new residents. Financial measures, such as area and local development charges, bonus zoning programs and parkland dedication based on density (through legislative changes) are all considerations.

Regional and Nature Park Network

Regional Parks encompass parks throughout HRM that have a regional significance. The objectives for Regional Parks, as outlined in our Regional Plan, are to preserve significant natural or cultural resources, and to be large enough to support both ecosystem protection and human enjoyment at the same time. The HGNP places specific attention on large Regional Parks, including Nature Parks, that along with Provincial Parks and certain crown land areas, provide nature-based recreation experiences. Managing such large parks and adding to the network by acquiring more lands, as proposed within this Plan, is fiscally challenging and will require partnerships with other levels of government and organizations.

Managing parks with other levels of government and land conservation groups with land holdings is also important from an ecological and recreation perspective. Strategic connections between such lands are essential from a network perspective.

Connectivity

Public parks form integral components along the Region's transportation corridors, and as public gathering places need to be connected with multiple forms of transportation, particularly active transportation (AT) and transit. Strategically located parks can also contain AT routes that enable people to travel through open space settings on their way to work, shops or services. The Integrated Mobility Plan (IMP) and AT Priority Plan provide detailed direction concerning key AT objectives, linkages and strategic investments. These mobility strategies should be coordinated with park network planning to maximize land use versatility while supporting recreational experiences and minimizing potential conflicts.



¹ Municipal Benchmarking Network Canada, 2016

4.4.3 Objectives and Actions

4.4.3.1. Recognize the importance of parks for community health and well-being.

Action 42: Promote parks and open spaces for health, well-being, sense of community and overall quality of life through improved public communication, such as through HRM's website.

Action 43: Through Halifax's Community Engagement Strategy, formalize a public engagement program for the planning and stewardship of parks.

Action 44: Incorporate year-round recreational infrastructure, including winter-oriented activities, when planning parks.

Action 45: Enhance existing standards for the design of parks with a focus on versatile and flexible space, based on the nature of different park types and situations, that encourages participation of all ages and abilities.

Action 46: Include culture and education programs and projects, such as the inclusion of public art within parks and nature interpretation programs when planning for parks.

Action 47: Ensure there is a clear and consistent communication system related to accessibility and wayfinding to and within parks.

Action 48: Encourage social gathering and animation of municipal open spaces by allowing such things as limited private and not for profit commercial initiatives.

4.4.3.2. Adopt a multi-jurisdictional parks network planning approach that supports both recreation service delivery and natural systems protection.

Action 49: During the next Regional Plan review introduce the Park Spectrum (Figure 6), which recognizes the Municipal role in providing the full range of outdoor recreation and ecological conservation functions and experiences of public open spaces together with Federal and Provincial parks and school grounds.

4.4.3.3. Develop new park network service delivery standards based on the settlement patterns and natural influences identified within the Regional Plan (refer to Appendix A).

Action 50: Develop service level targets for the Regional Plan settlement types to provide public access to the spectrum of recreation experiences (e.g. sportsfields, playgrounds, nature trails), within the Halifax park system.

Action 51: Revise travel time/distance tolerance targets and standards to the nearest park based on the designations in the Regional Plan to account for HRM's varied settlement patterns and residential densities.

Action 52: Revise public park area per capita targets and standards based on designations in the Regional Plan to account for HRM's varied settlement patterns.

Action 53: With the development of new parkland targets and standards, amend the Regional Plan and Regional Subdivision By-law to direct the acquisition, development and management of Municipal parkland.

4.4.3.4. Evaluate service needs and overlap to guide parkland acquisition, disposal and management decisions.

Action 54: Determine service delivery gaps and overlap based on established travel time and park pressure targets (above objective) that considers the distribution of Municipal Parks together with Provincial and Federal Parks, and school grounds.

4.4.3.5. Evaluate the functional performance of existing and proposed Municipal parkland to guide parkland acquisition, disposal and management decisions.

Action 55: Use the Land Capability Analysis Tool (Appendix B) to evaluate existing and proposed parks for their land capability in terms of:

- » Identity (sense of place)
- » Heritage conservation
- » Recreation land use
- » Natural systems conservation
- » Connectivity

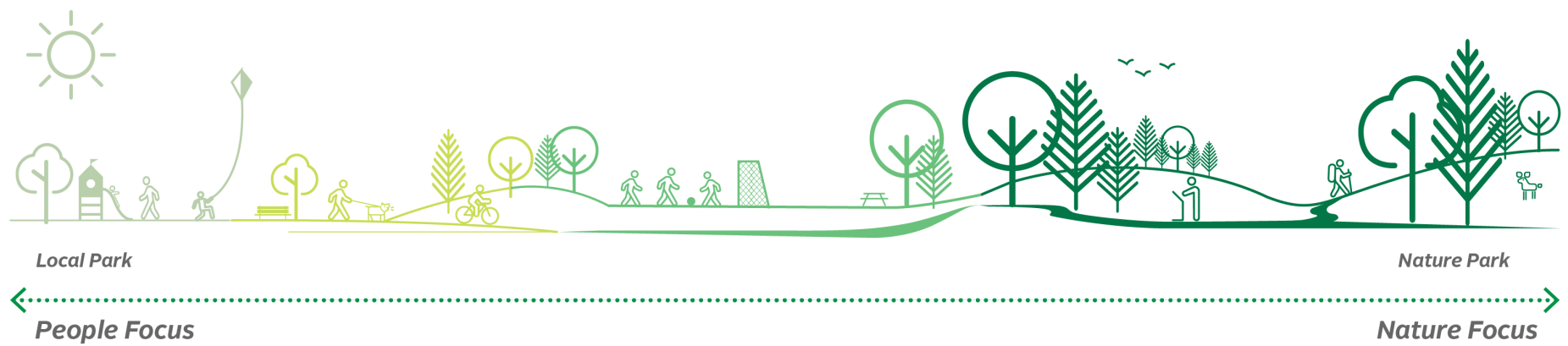


Figure 6: Halifax's Park Spectrum

Action 56: Develop a park performance monitoring program to regularly gather park usage data from park and recreation staff, the public, and new technology to count users.

Action 57: Use information gathered through the park performance monitoring program and the Land Capability Analysis Tool (Appendix B) to develop an inventory of low, moderate and high performing parks.

Action 58: Prepare policies and procedures concerning parkland maintenance to incorporate naturalization and green infrastructure (ie. rain gardens and bioswales).

Action 59: In cases of significant service overlap and low scoring from the Land Capability Analysis Tool (Appendix B), consider the disposal of identified low performing parkland.

4.4.3.6. Use and expand available park planning policy tools to address parkland and facility needs as demands arise from new development.

Action 60: Continue to study and consider the adoption of infrastructure charges to support the development and improvement of parks and recreation facilities that are needed to support new development.

Action 61: Formally request that the Province amend the *Halifax Regional Municipality Charter* to enable a

greater range of legislative abilities, such as the ability to enact parkland dedication requirements based on density to address development that does not include the subdivision of lots.

4.4.3.7. Support the establishment of a nature park network in cooperation with Provincial and Federal governments and conservation groups.

Action 62: During the next Regional Plan review, amend the Regional Plan concerning Regional Parks to differentiate Regional Park types with particular regard to Nature Parks - which are specially designed to protect an area of land and/or water, support natural processes, species and habitat; and where human activities are primarily passive (e.g. hiking, nature interpretation and appreciation), and do not compromise ecological function.

Action 63: As opportunities arise, coordinate with Provincial and Federal governments and conservation groups to establish a nature park network.

4.4.3.8. Continue to place an emphasis on planning and establishing the future Regional Parks that are identified within the Regional Plan.

Action 64: During the next Regional Plan review assess the establishment of future Regional Parks, as identified in the Regional Plan, and their boundaries, through the Land Capability Analysis Tool (Appendix B) and other criteria that includes:

- a. The location of any existing conceptual park boundary
- b. Relationship to adjacent lands and community
- c. The landform, ecological attributes, and cultural features of the lands including connectivity to other lands
- d. The presence or potential for recreational features such as existing trails and their usage
- e. Existing and possible access to the lands and the ability to accommodate primary or secondary trailheads
- f. The planning, zoning, and development potential of the lands
- g. The interest of competing development plans and the impact that municipal parkland acquisition would have on them
- h. Acquisition models such as outright purchase or other alternatives
- i. Financial and budget factors

Action 65: For other future Nature Parks and other open spaces that are already largely in public ownership, continue to work with the Province and other stakeholders respecting their delineation of boundaries, planning and programming.

4.4.3.9. Recognize new Nature Parks and open space areas.

Action 66: During the next Regional Plan review amend the Regional Plan to recognize recent land acquisitions (pending) within the Purcell's Cove Backlands as Regional Park and consider open space planning for the remainder of this area.

Action 67: During the next Regional Plan review amend the Regional Plan to recognize community land conservation initiatives as part of the 100 Wild Islands.

Action 68: In conjunction with any Provincial initiative consider open space and parkland opportunities in the Wrights Lake area as they arise.

4.4.3.10. Continue to implement the recommendations of major open space studies that have been undertaken.

Action 69: Continue to implement the approved Cole Harbour Basin Open Space Plan.

4.4.3.11. Connect parks and open space areas for recreation and mobility purposes

Action 70: Use the HGNP and other municipal plans, including the AT Priority Plan and Integrated Mobility Plan (IMP) to establish linkages between parks, Provincial Wilderness Areas, crown lands, fresh waterbodies and ocean fronts that are used for recreation purposes.

4.5 CULTURAL LANDSCAPES

The landscape of the Halifax Region is characterized by a complex history of human habitation dating back over 10,000 years. Cultural Landscapes reflect the interaction between people and nature over time and include landscapes that have been created, used, modified or protected - from historic gardens to heritage conservation districts, from streetscapes to scenic views.



4.5.1 Goal

Identify, preserve and celebrate cultural landscapes and their value in connecting people to the land and telling their stories.

4.5.2 Key Considerations

Cultural Landscape Framework Study

The *Cultural Landscape Framework Study*, undertaken as part of the HGPN, provides background information on cultural landscape theory and practice. The study establishes baseline data and recommends next steps for identifying, conserving and managing cultural landscapes. The study identifies 17 Priority Areas, as shown on the Cultural Landscapes Map (Map 12).

The landscapes identified through the *Cultural Landscape Framework Study* are not a complete list of cultural landscapes in the Region, but rather a starting point to identify potential cultural landscapes and develop a comprehensive inventory. A program for the identification, conservation, management and celebration of cultural landscapes will be considered through the *Culture and Heritage Priorities Plan*. A full description of how cultural landscapes were identified and prioritized can be found in the *Cultural Landscape Framework Study*.

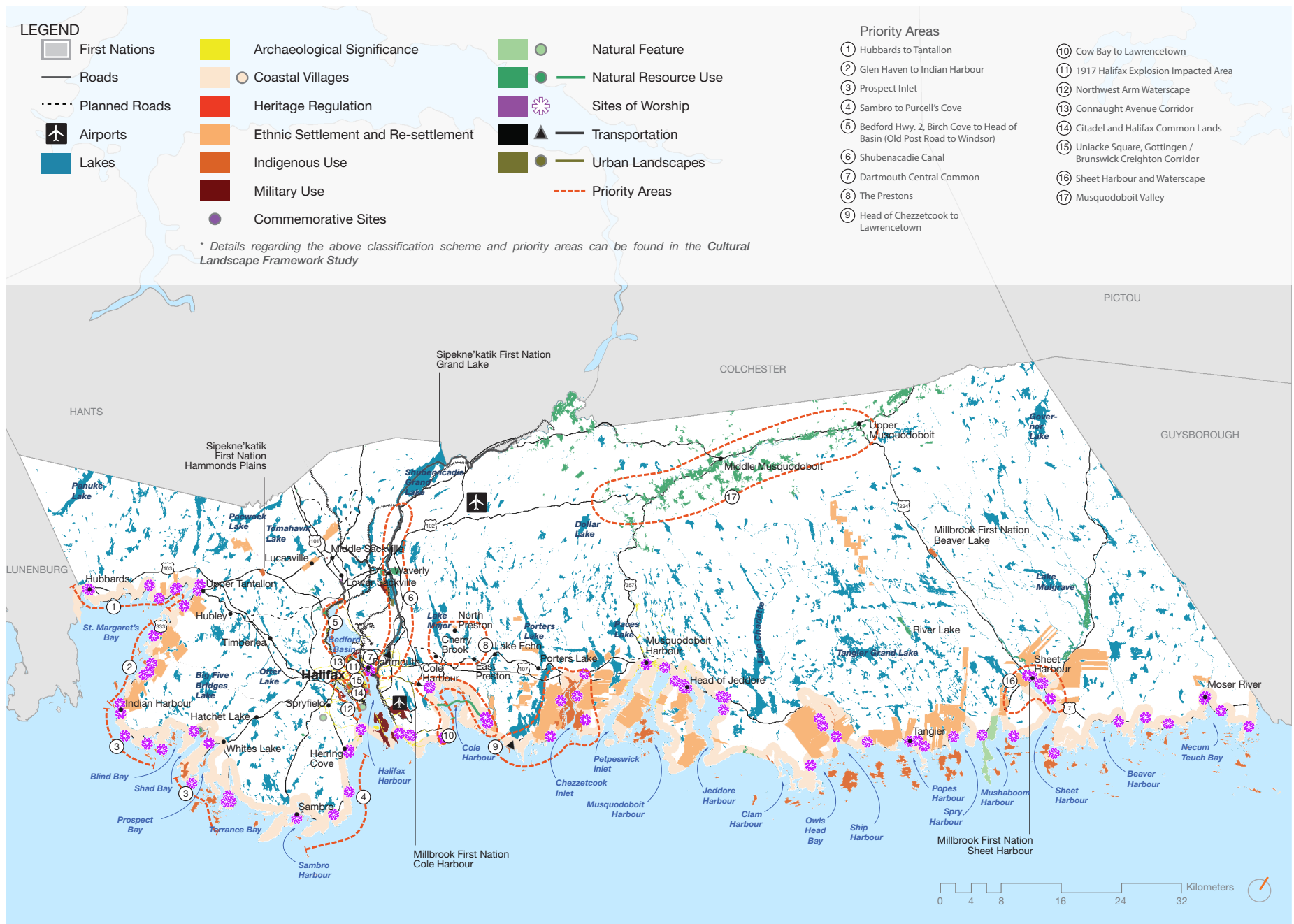
Cultural Resources

Cultural landscapes demonstrate the connection between people and their environment over time. This can include a range of elements and different management considerations. Traditional activities (e.g. hunting, fishing and food gathering) and traditional pathways and gathering places, can be threatened by landscape alterations from development or natural forces like climate change. Historic streetscapes, buildings and community infrastructure may require protection from redevelopment or alteration to persist in a changing human landscape. Proper protection and management are essential to ensure that traditional practices and landmarks are not lost.

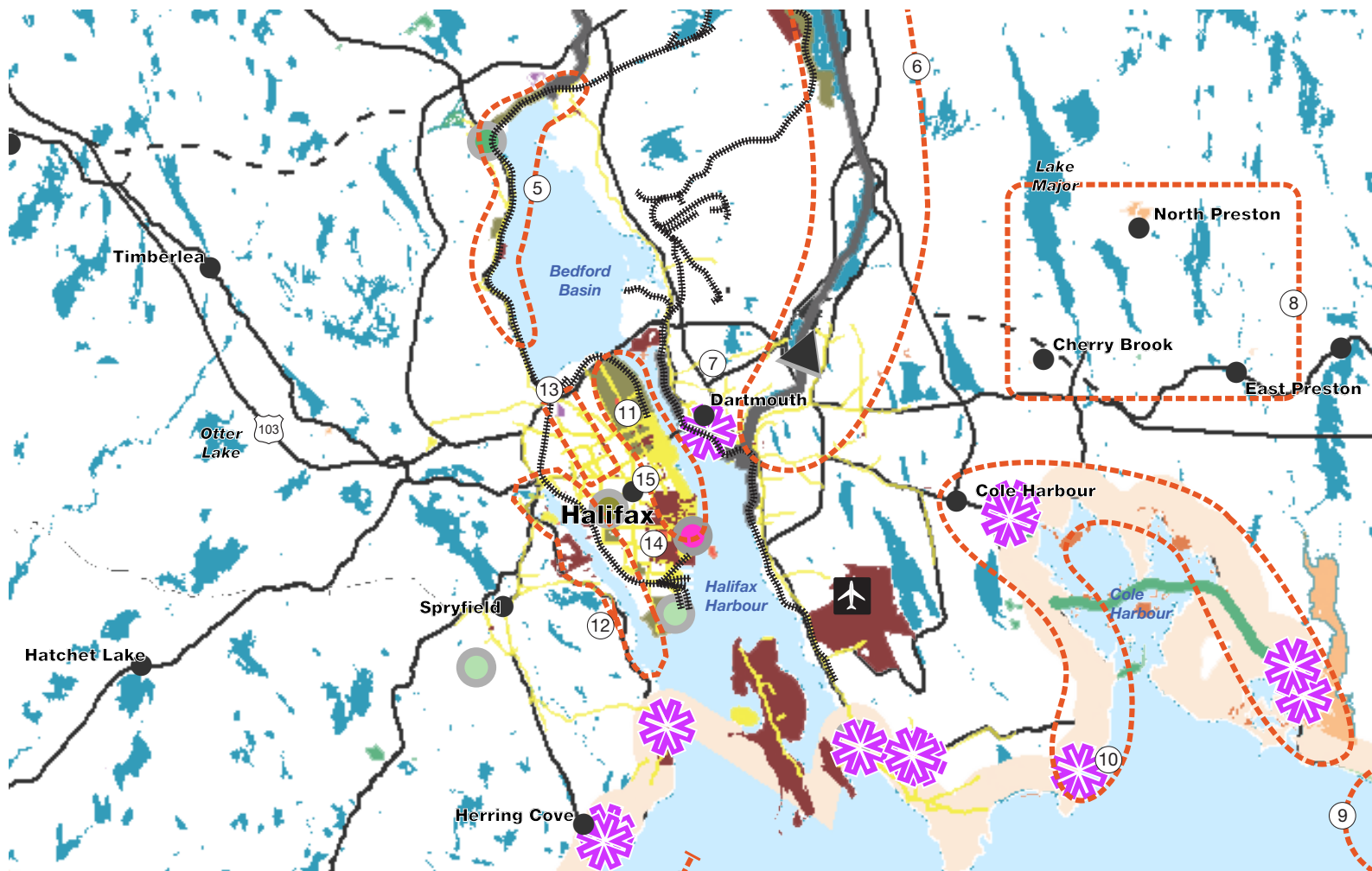
All Stories

While the HGPN involved significant engagement, landscapes and resources of value to African Nova Scotians, Mi'kmaq, Acadian and other diverse cultures are a recognized gap in the Plan and require targeted engagement and research.

As the places that connect us to our history and define our regional identity, cultural landscapes are also intricately bound to a sense of place and well being. Key to understanding the unique relationship between people and the land, it is critical that the cultural landscape approach is accessible and inclusive of the diverse voices of communities, groups and individuals in the Region. This is fundamental to understanding the highly subjective nature of individual and collective values and people's



Map 12: CULTURAL LANDSCAPES



Map 13: CULTURAL LANDSCAPES (ZOOMED INTO THE URBAN CORE)

LEGEND

First Nations	Heritage Regulation	Sites of Worship
Roads	Ethnic Settlement and Re-settlement	Transportation
Planned Roads	Indigenous Use	Urban Landscapes
Airports	Military Use	Priority Areas
Lakes	Commemorative Sites	
Archaeological Significance	Natural Feature	
Coastal Villages	Natural Resource Use	

* Details regarding the above classification scheme and priority areas can be found in the Cultural Landscape Framework Study

Priority Areas

- | | |
|--|--|
| ④ Sambro to Purcell's Cove | ⑩ Cow Bay to Lawrencetown |
| ⑤ Bedford Hwy. 2, Birch Cove to Head of Basin (Old Post Road to Windsor) | ⑪ 1917 Halifax Explosion Impacted Area |
| ⑥ Shubenacadie Canal | ⑫ Northwest Arm Waterscape |
| ⑦ Dartmouth Central Common | ⑬ Connaught Avenue Corridor |
| ⑧ The Prestons | ⑭ Citadel and Halifax Common Lands |
| ⑨ Head of Chezzetcook to Lawrencetown | ⑮ Uniacke Square, Gottingen / Brunswick Creighton Corridor |

interactions with the land. For example, the high value overlap of the Musquodoboit River Valley lies in its association with Mi'kmaq use and occupancy, Irish Protestant and Icelandic settlement, agricultural development and numerous other events and uses.

Drawing on the premise of the *Cultural Landscape Framework Study*, the citizens of HRM are recognized as the drivers to identify the cultural landscapes they value. Identifying, preserving, celebrating and appropriately managing cultural landscapes involves learning from local communities through the inclusion of a wide spectrum of individual voices. Consequently, proactive and targeted research is needed to address gaps in the inventory and protect landscapes of interest to African Nova Scotians, Mi'kmaq and other historically under-represented groups.



4.5.3 Objectives and Actions

4.5.3.1. Develop a cultural landscape program.

Action 71: Use the *Cultural Landscape Framework Study* as the guiding document for the consideration of potential cultural landscapes and the basis for a future cultural landscape program to be advanced through the *Culture and Heritage Priorities Plan*.

Action 72: Engage with the Province as they update the *Heritage Property Act* to include policies on the registration of cultural landscapes.

4.5.3.2. Identify, preserve and celebrate valued cultural landscapes in the design and management of open spaces and developments.

Action 73: Amend the *Regional Plan* to clarify the scope and purpose of cultural landscape studies, based on the *Cultural Landscape Framework Study*, as an integral component of master neighbourhood and business park planning initiatives and the identification, preservation and celebration of these landscapes.

Action 74: Amend the *Regional Plan* to include cultural landscapes as elements that must be considered when preparing conservation design development agreements.

Action 75: Maintain and enrich the inventory of potential cultural landscapes identified in the *Cultural*

Landscape Framework Study through planning initiatives, community engagement and other Municipal initiatives.

Action 76: Identify, preserve and celebrate cultural landscapes and resources when preparing master plans for publicly-owned open spaces.

Action 77: Work with the Province to update the accuracy and use of the Areas of Elevated Archaeological Potential Map contained in the *Regional Plan*.

4.5.3.3. Ensure that all perspectives and voices are heard when identifying cultural landscapes and carrying out initiatives that may impact valued cultural features.

Action 78: Proactively engage and expand the inventory of cultural landscapes of interest to African Nova Scotian, Mi'kmaq, Acadian and immigrant communities.

Action 79: Engage groups that have traditionally been underrepresented in planning initiatives, including African Nova Scotian, Mi'kmaq, Acadian, and immigrant communities, when developing cultural landscape plans and policies.

5 Monitoring

Establishing and monitoring key indicators is important for measuring progress towards achieving the vision, goals and objectives of this plan. The performance of indicators over time will signal to the Municipality whether current initiatives are producing the desired outcomes, when it should refine initiatives, shift priorities, or respond to evolving opportunities and challenges.

While the Municipality often collects project-based information on the natural environment, it does not currently monitor the health of the Region's wildlife, ecosystem services or natural landscapes. Consequently, this chapter focuses on refining existing monitoring efforts and identifying opportunities to form partnerships with Provincial Departments, universities and non-profits to help guide the selection and monitoring of key indicators.

5.1 REGIONAL PLAN KEY PERFORMANCE INDICATORS

The *Regional Plan* directs the collection of information on key performance indicators to help evaluate the effectiveness of the Plan. Building on this direction, the Municipality has developed a monitoring program to track information related to theme areas, with the frequency of reporting based on the availability of information and staff resources. Several key indicators within the Environment and Energy theme are useful for monitoring the effectiveness of the HGNP. These include:



The status of new or proposed Regional Parks. This indicator is useful for monitoring Municipal progress on key park initiatives and should be revised to reflect the direction contained in this Plan and its focus on regional scale Nature Parks.



Percentage of residents in the Regional Centre and urban communities living within 800m (or a 10 minute walk) of open space or parkland. This indicator is essential for monitoring progress towards park network service standards and should be revised to match the targets as they are developed.



The number of trees planted through the Urban Forest Master Plan – public realm.

This indicator is important for monitoring the state of the Municipality's urban forest. Given current efforts to gather information on all existing trees, consideration should be given to refining this indicator to monitor the total number of trees on public land, which better reflects the Municipality's growing management responsibilities instead of only the number of trees planted each year.



The number of beach closure days.

This indicator indirectly measures the health of our Region's water resources, a key measure of overall ecosystem health. Water quality monitoring is further discussed in this section.



5.2 MONITORING: PARTNERSHIP OPPORTUNITIES

While the *State of the Landscape Report* compiled a wide variety of information, the Municipality does not currently have the capacity or expertise to identify key indicators or collect and interpret the information on a regular basis. Thankfully, the Region contains several universities and non-profit organizations that specialize in wildlife and ecosystem science. Nova Scotia Environment and the Department of Natural Resources also monitor information on the health of the environment and support the protection and sustainable use of Crown lands. Consequently, rather than building in-house expertise or duplicating Provincial efforts, the Municipality is well positioned to form partnerships that complement the Municipality's focus on land use planning and park network management.

The following sections discuss important topic areas and potential partnership opportunities that could help the Municipality identify key indicators and monitor progress towards the goals and objectives contained in this Plan.

5.5.1 Wildlife Movements & Biodiversity

Monitoring the health and movement of wildlife in the Region is key to understanding whether the HGNP's direction to maintain wildlife habitats and corridors is working. The Provincial Department of Natural Resources is responsible for monitoring biodiversity and species at risk and is a potential partner for monitoring the effectiveness of the Municipality's efforts to protect wildlife habitat. In addition, the Canadian Wildlife Service of Environment and Climate Change Canada and its partners, including Bird Studies Canada, are potential partners for the Municipality as they are responsible for monitoring the health of migratory bird populations and Federally protected terrestrial species at risk in the Region. Finally, Fisheries and Oceans Canada is responsible for protecting and monitoring the health of aquatic and marine species at risk in the Region.

The Region is also home to a number of subscribers to free citizen-science programs that monitor wildlife occurrences in near real-time (e.g., the eBird.ca platform to monitor bird sightings). There are also online citizen-science initiatives such as iNaturalist.ca that allow residents to document and share observations of harmful invasive species like Giant

Hogweed. The Municipality and its partners can take advantage of these programs and the freely accessible online data they provide to monitor local wildlife populations and the health of ecosystems.

5.5.2 Water Quality and Quantity

Healthy ecosystems and good water quality are inherently linked. While the Municipality has conducted several watershed studies, regularly monitors beach water quality (for swimming) and previously managed a lake monitoring program on selected lakes (2006-2011), it does not use the information to understand the overall health and sustainability of the Region's natural environment. However, since water quality and quantity are linked to healthy ecosystems, regular monitoring of water quality in our lakes, rivers and coasts could provide a key indicator of the Region's environmental sustainability.

A number of organizations are currently involved in researching and monitoring water quality and quantity. These include:

- » Halifax Water, which regularly monitors water quality of the Region's potable water supplies
- » Nova Scotia Environment, which can require water quality/quantity monitoring under environmental approvals issued under the

Environment Act, also collects ambient water quality and water quantity data at stations throughout the Province

- » University researchers who focus on water quality and its link to land management
- » Non-profits and community groups, which may conduct research or may be interested in collecting samples

There are many approaches to water quality and quantity monitoring to consider depending on how the information will be used to inform programs and decisions. Partnerships with the above organizations are important to identifying the key variables to monitor, the Municipality's role, and how the information can feedback into land use planning and other Municipal decision-making processes.



5.5.3 Green Cover

One of the overarching goals of this Plan is to maintain and enhance the Region's diverse network of green space. Progress towards this goal, however, cannot be accurately assessed without understanding changes in the Region's green cover overtime, including the size of forests, crop lands, wetlands, wildlife corridors, riparian buffers and other features.

At the Provincial level, the Department of Natural Resource collects information on forests, the Department of Agriculture collects information on agricultural crop land and Nova Scotia Environment works with others to maintain information on wetlands in Nova Scotia.

Additionally, Natural Resources Canada and Environment and Climate Change Canada administer national programs to monitor land use, forest health and land cover change using imagery derived from Earth observation satellites. Partnerships with research institutions that specialize in remote sensing technology could also be helpful for filling knowledge gaps and analyzing changes overtime.



6 Implementation

Chapter 4 recommends a total of 89 actions needed to effectively support the vision, goals and objectives contained in this Plan. While Chapter 4 organized the actions by the five HGNP theme areas, the following section group the actions according to the following implementation tools:

- Land Use Planning
- Park Network Management
- Current and Future Project Work
- Partnerships

Implementation tools, timelines and budget and resource implications are discussed.

6.1 LAND USE PLANNING

The Municipality has adopted a number of land use policy and regulatory documents, including the Regional Plan, the Regional Subdivision By-law, secondary plans and land use by-laws, that control development on privately owned land. Together, these documents, among many other matters, regulate the location, shape and form of development including if and where new public roads can be constructed, the design and density of new development, parkland dedication requirements and watercourses setbacks. The HGNP includes a number of actions that provide guidance and specific instructions on how to amend these planning documents through future project work.

Timeframe

All actions are intended to be completed as part of the next Regional Plan review and plan and by-law simplification program. While the workplan for this major project work has not been set, the projects are expected to be carried out in phases and completed over timeframes ranging from 2-7 years. In addition, all land use planning related actions, together with the full HGNP, can immediately be referenced for guidance as part of current planning projects and reviews of MPS amendment requests.

Budget and Resource Implications

No new resource or budget implications are identified beyond those needed to carry out the plan and by-law simplification program and next Regional Plan review.



ACTION #	THEME	ACTION	DIRECTION
1	Ecology	<p>Refine and incorporate the Green Network Ecology Map (Map 5 on page 35) into the <i>Regional Plan</i> and use it to guide regional planning decisions related to the location and shape of:</p> <ul style="list-style-type: none"> » Urban service boundaries » Rural centres » Nature parks » Conservation design developments 	2-7 Years
2	Ecology	<p>Consider the following design and management guidelines when planning, maintaining and restoring essential and important corridors (Map 5 on page 35) through Municipal Planning Strategies and Land Use By-laws:</p> <ul style="list-style-type: none"> » Essential corridors should ideally be greater than 1km wide and composed of intact natural habitat, wherever possible » The width of essential corridors should increase in proportion to its length (i.e. the longer the corridor, the wider it should be) » Where a 1km width is not possible for essential corridors, maintain what remains, seek opportunities to restore disturbed areas and mitigate the impacts of nearby human activity » Maintain a minimum corridor width of 100m for important corridors to connect natural habitats » Where intact important corridors are unavailable and/or not possible to restore, maintain the largest possible remnant patches and encourage best management practices in intervening areas to provide opportunities for wildlife movement between patches 	Guidance
3	Ecology	Amend Municipal Planning Strategies to clarify and ensure that environmental sensitive areas are identified and considered during the review of all discretionary planning applications (i.e. rezoning and development agreement applications).	2-7 Years
4	Ecology	Amend the <i>Regional Plan</i> to emphasize the importance of identifying and protecting environmental sensitive areas during master neighbourhood planning exercises (secondary planning).	2-7 Years
5	Ecology	Amend Municipal Planning Strategies and Land Use By-laws to consolidate environmental protection zones, which prohibit most forms of development, and apply these zones to areas with significantly sized vulnerable landforms, such as ravines and bluffs.	2-7 Years

ACTION #	THEME	ACTION	DIRECTION
6	Ecology	<p>Amend Municipal Planning Strategies and Land Use By-laws to consolidate, clarify and refine the Municipality's variable approach to watercourse buffers. Specific measures to consider include:</p> <ul style="list-style-type: none"> » Consolidating environmental protection zones and applying these zones to sensitive riparian areas and wetlands, such as coastal marshlands, floodways and large wetland complexes, based on detailed mapping and analysis » Increasing the minimum required riparian buffer around drinking water supply sources, established under the Protected Water Supply Zone, from 30.5 to 100 metres » Establishing a consistent watercourse buffer requirement for industrial zones and uses, which currently range from 20 to 100 metres for some zones and specific uses » Increasing the standard watercourse buffer requirement from 20 to 30 metres for watercourses that are greater than 50 cm wide » Maintaining a watercourse buffer requirement of 20 metres for watercourses that are intermittent or less than 50 cm wide » Maintaining special watercourse buffering requirements established for vulnerable areas, such as the special requirements that apply to Cow Bay » Removing the formula to increase the buffer requirements based on slope for inland watercourses (not marine coast), as the requirement is rarely applicable and adds unnecessary complexity to the permitting process 	2-7 Years
8	Ecology	Update the landscaping requirements in the Land Use By-laws to support the implementation of the <i>Urban Forest Master Plan</i> by prohibiting the use of invasive species.	2-7 Years
19	Working Landscapes	Amend Municipal Planning Strategies and Land Use By-laws to direct residential uses away from areas suitable for resource extraction and forestry uses. (See the Community Shaping Section for more specific direction concerning rural centres and conservation design developments).	2-7 Years
20	Working Landscapes	Amend Municipal Planning Strategies and Land Use By-laws to provide more opportunities for uses that support primary resource industries, such as aggregate and wood processing facilities in locations with high value working landscapes (Map 7 on page 43). Specific measures to consider include providing as-of-right development opportunities (without a lengthy rezoning or development agreement process) for resource developments that locate in areas that are buffered from nearby residential areas, wildlife corridors and core areas shown on the Green Network Ecology Map (Map 5 on page 35).	2-7 Years
21	Working Landscapes	Amend the <i>Regional Plan</i> to limit or prohibit conservation design developments in the Agricultural Designation.	2-7 Years

ACTION #	THEME	ACTION	DIRECTION
22	Working Landscapes	<p>Amend Municipal Planning Strategies and Land-Use By-laws to encourage agricultural developments and supportive uses to locate and expand in agricultural areas. Specific measures to consider include:</p> <ul style="list-style-type: none"> » Ensuring setback and separation distance requirements are reasonable and do not unduly restrict the development or expansion of processing facilities or agricultural structures » Reducing the size and extent of non-agricultural uses in agricultural areas to limit the loss of high quality soils to non-agricultural developments » Ensuring permitted agricultural-related uses are inclusive of changing business practices and opportunities 	2-7 Years
24	Working Landscapes	<p>Amend Municipal Planning Strategies and Land Use By-laws to encourage small-scale agriculture on private properties. Specific measures to consider include:</p> <ul style="list-style-type: none"> » Removing barriers to appropriately-scaled urban agriculture and food retail on private property including, road side stands and animal husbandry » When reviewing landscaping requirements, ensure that edible landscaping, such as fruit trees and herb gardens, are permitted types of vegetation 	2-7 Years
26	Working Landscapes	Amend Municipal Planning Strategies and Land Use By-laws to ensure that rural industrial developments are adequately screened from scenic roads and trails.	2-7 Years
27	Working Landscapes	Review Municipal Planning Strategies and Land Use By-laws to maintain and, where needed, increase lot size and frontage requirements to prevent dense “ribbon development” along scenic routes located between rural centres.	2-7 Years
28	Working Landscapes	<p>Amend Municipal Planning Strategies and Land Use By-laws to encourage both small- and large-scale tourism related uses in rural areas. Specific measures to consider include:</p> <ul style="list-style-type: none"> » Relaxing restrictions for home-based businesses that cater to tourists, such as bed and breakfast operations, accessory cabins, tour operations, arts and crafts, farms stays, and commercial recreation (such as kayak rentals etc) » Where not already permitted, considering the development of large-scale resorts, campgrounds, spas and hotels by rezoning or development agreement in rural areas that balance tourism opportunities with impacts on the environment and nearby residents » Enabling the development of resource-based and eco-tourism opportunities, including fishing, wildlife viewing, hunting, agriculture and forestry focused tours and experiences 	2-7 Years

ACTION #	THEME	ACTION	DIRECTION
29	Community Shaping	Amend the <i>Regional Plan</i> to ensure that the Green Network map (Map 5 on page 35), is considered when reviewing changes to the Urban Service Area boundary, Urban Settlement Designation, Urban Reserve Designation, and when preparing Secondary Planning Strategies.	2-7 Years
30	Community Shaping	Amend the <i>Regional Plan</i> to clarify the purpose and scope of land suitability assessments, which identify vulnerable landforms and other ecological features, as base information needed to inform the design of new mixed-use neighbourhoods and business park developments.	2-7 Years
31	Community Shaping	Amend the <i>Regional Plan</i> to prioritize the redevelopment of brownfield sites and other underdeveloped urban infill sites ahead of undisturbed greenfield sites.	2-7 Years
32	Community Shaping	Amend the <i>Regional Plan</i> and Municipal Planning Strategies to prioritize the preservation and creation of natural connections to the Chebucto Peninsula (Map 9) from the Mainland when reviewing development proposals and updating planning policies and zoning in the area. Specific connections to review and prioritize are highlighted on Map 9.	2-7 Years
35	Community Shaping	Amend the <i>Regional Plan</i> to better define the size, shape and location of all rural centres in relation to natural corridors and valued open spaces.	2-7 Years
36	Community Shaping	<p>Amend the <i>Regional Plan</i> by updating the conservation design development policies to streamline the planning process for proposed developments located within rural centres. Specific planning approaches to consider include:</p> <ul style="list-style-type: none"> » Site plan approvals, which can direct development to suitable areas, without involving the lengthier development agreement process » Enabling as-of-right developments within carefully selected pre-zoned areas 	2-7 Years
37	Community Shaping	<p>Amend the <i>Regional Plan</i> conservation design development agreement policies to:</p> <ul style="list-style-type: none"> » Further focus development within rural centres » Avoid conflicts with working landscapes » Direct development to the edges of the core areas shown on the Green Network Ecology Map (Map 5 on page 35) » Preserve the essential and important corridors shown on the Green Network Ecology Map (Map 5 on page 35) » Take a cautious approach to development within areas of high environmental value (Map 5 on page 35) by ensuring the underlying values are investigated and conserved and any impacts from development are mitigated 	2-7 Years

ACTION #	THEME	ACTION	DIRECTION
62	Outdoor Recreation	During the next Regional Plan review, amend the Regional Plan concerning Regional Parks to differentiate Regional Park types with particular regard to Nature Parks - which are specially designed to protect an area of land and/or water, support natural processes, species and habitat; and where human activities are primarily passive (e.g. hiking, nature interpretation and appreciation), and do not compromise ecological function.	2-7 Years
66	Outdoor Recreation	During the next Regional Plan review amend the Regional Plan to recognize recent land acquisitions (pending) within the Purcell's Cove Backlands as Regional Park and consider open space planning for the remainder of this area.	2-7 Years
67	Outdoor Recreation	During the next Regional Plan review amend the Regional Plan to recognize community land conservation initiatives as part of the 100 Wild Islands.	2-7 Years
73	Cultural Landscapes	Amend the <i>Regional Plan</i> to clarify the scope and purpose of cultural landscape studies, based on the <i>Cultural Landscape Framework Study</i> , as an integral component of master neighbourhood and business park planning initiatives and the identification, preservation and celebration of these landscapes.	2-7 Years
74	Cultural Landscapes	Amend the <i>Regional Plan</i> to include cultural landscapes as elements that must be considered when preparing conservation design development agreements.	2-7 Years



6.2 PARK NETWORK MANAGEMENT

There are a number of action items specific to the management of municipal parkland that support the goals and objectives set out in this Plan. Initiatives include recognizing the importance of parks for community health and well-being, developing new park network delivery standards, and expanding available park planning policy tools to address parkland and facility needs.

Timeframe

Actions are divided into items that provide on-going guidance and those to be initiated within timeframes ranging from 1-7 years.

Budget and Resource Implications

All actions can be carried out as part of the business plans for individual business units. Some action items may require further inquiry, lead to the development of new programs or require strategic investments. Any resulting budget implications will be considered through the business planning cycle or project specific Council reports. Reprioritization and additional resources may be required.

ACTION #	THEME	ACTION	DIRECTION
23	Working Landscapes	Balanced with other open space uses, support community gardens and other forms of food production in public parks and other Municipally-owned properties.	Guidance
25	Working Landscapes	Consider community gardens, fruit trees, and food supportive amenities, when preparing master plans for public open spaces.	Guidance
42	Outdoor Recreation	Promote parks and open spaces for health, well-being, sense of community and overall quality of life through improved public communication, such as through HRM's website.	Guidance
43	Outdoor Recreation	Through Halifax's Community Engagement Strategy, formalize a public engagement program for the planning and stewardship of parks.	Guidance
44	Outdoor Recreation	Incorporate year-round recreational infrastructure, including winter-oriented activities, when planning parks.	Guidance
45	Outdoor Recreation	Enhance existing standards for the design of parks with a focus on versatile and flexible space, based on the nature of different park types and situations, that encourages participation of all ages and abilities.	Guidance
46	Outdoor Recreation	Include culture and education programs and projects, such as the inclusion of public art within parks and nature interpretation programs when planning for parks.	Guidance
47	Outdoor Recreation	Ensure there is a clear and consistent communication system related to accessibility and wayfinding to and within parks.	Guidance
48	Outdoor Recreation	Enhance social gathering in municipal open spaces by encouraging limited private and not for profit commercial initiatives.	1-4 Years
49	Outdoor Recreation	During the next Regional Plan review introduce the Park Spectrum (Figure 6), which recognizes the Municipal role in providing the full range of outdoor recreation and ecological conservation functions and experiences of public open spaces together with Federal and Provincial parks and school grounds.	2-7 Years
50	Outdoor Recreation	Develop service level targets for the Regional Plan settlement types to provide public access to the spectrum of recreation experiences (e.g. sportsfields, playgrounds, nature trails), within the Halifax park system.	1-2 Years
51	Outdoor Recreation	Revise travel time/distance tolerance targets and standards to the nearest park based on the designations in the Regional Plan to account for HRM's varied settlement patterns and residential densities.	1-2 Years
52	Outdoor Recreation	Revise public park area per capita targets and standards based on designations in the Regional Plan to account for HRM's varied settlement patterns.	1-2 Years
53	Outdoor Recreation	With the development of new parkland targets and standards, amend the Regional Plan and Regional Subdivision By-law to direct the acquisition, development and management of Municipal parkland.	1-2 Years

ACTION #	THEME	ACTION	DIRECTION
54	Outdoor Recreation	Determine service delivery gaps and overlap based on established travel time and park pressure targets (above objective) that considers the distribution of Municipal Parks together with Provincial and Federal Parks, and school grounds.	1-2 Years
55	Outdoor Recreation	<p>Use the Land Capability Analysis Tool (Appendix B) to evaluate existing and proposed parks for their land capability in terms of:</p> <ul style="list-style-type: none"> » Identity (sense of place) » Heritage conservation » Recreation land use » Natural systems conservation » Connectivity 	1-2 Years
56	Outdoor Recreation	Develop a park performance monitoring program to regularly gather park usage data from park and recreation staff, the public, and new technology to count users.	1-2 Years
57	Outdoor Recreation	Use information gathered through the park performance monitoring program and the Land Capability Analysis Tool (Appendix B) to develop an inventory of low, moderate and high performing parks.	1-4 Years
58	Outdoor Recreation	Prepare policies and procedures concerning parkland maintenance to incorporate naturalization and green infrastructure (ie. rain gardens and bioswales).	1-4 Years
59	Outdoor Recreation	In cases of significant service overlap and low scoring from the Land Capability Analysis Tool (Appendix B), consider the disposal of identified low performing parkland.	Guidance
64	Outdoor Recreation	<p>During the next Regional Plan review assess the establishment of future Regional Parks, as identified in the Regional Plan, and their boundaries, through the Land Capability Analysis Tool (Appendix B) and other criteria that includes:</p> <ul style="list-style-type: none"> a. The location of any existing conceptual park boundary b. Relationship to adjacent lands and community c. The landform, ecological attributes, and cultural features of the lands including connectivity to other lands d. The presence or potential for recreational features such as existing trails and their usage e. Existing and possible access to the lands and the ability to accommodate primary or secondary trailheads f. The planning, zoning, and development potential of the lands g. The interest of competing development plans and the impact that municipal parkland acquisition would have on them h. Acquisition models such as outright purchase or other alternatives i. Financial and budget factors 	Guidance

ACTION #	THEME	ACTION	DIRECTION
76	Cultural Landscapes	Identify, preserve and celebrate cultural landscapes and resources when preparing master plans for	Guidance



6.3 CURRENT AND FUTURE PROJECT WORK

The Municipality is continually carrying out project work on a wide variety of items, from considering the development of new Municipal business parks to reviewing corporate policies and by-laws. A number of the actions contained in this Plan guide current and future project work. Some projects may lead to strategic investments, programs, policies or regulations.

Timeframe

The expected timeframe for each action depends on referenced project work. While many actions guide on-going activities, other actions are expected to be completed within 1-7 years.

Budget and Resource Implications

All actions can be carried out as part of the business plans for individual business units. No new staff or budget items specific to the below actions are anticipated at this time. However, project work may lead to the development of new programs or identify strategic investments. Any resulting budget implications will be considered through the business planning cycle or project specific Council reports.

ACTION #	THEME	ACTION	DIRECTION
7	Ecology	Continue to implement the <i>Urban Forest Master Plan</i> .	Guidance
9	Ecology	Consider the adoption of a private trees by-law to manage the removal of trees on private property within serviced (urban) areas. Specific direction to consider includes: <ul style="list-style-type: none"> » Focusing on large properties with development potential while minimizing impacts on small properties » Prioritizing the protection of trees and vegetation within the watercourse buffer » Developing an educational campaign to promote tree stewardship on private property 	1-2 Years
10	Ecology	When updating the <i>Municipal Design Guidelines</i> (Red Book) consider requiring developers to install street trees in front of developments located on existing streets that do not currently contain street trees.	1-2 Years
14	Ecology	Continue to update the Region's flood scenario mapping and, through individual project work, prioritize the preservation and restoration of riparian areas and shoreline vegetation as an effective method for mitigating flood impacts.	Guidance
15	Ecology	Consider Municipal efforts to protect and expand the Green Network when assessing Municipal contributions to mitigating green house gas emissions, including protection of land-based green carbon sinks and intertidal areas (e.g., saltmarshes) that act as blue carbon sinks.	Guidance
16	Ecology	Make the Green Network Database available to all Municipal departments, as well as freely available to the public through HRM's Open Data Catalogue.	1-2 Years
17	Ecology	Explore opportunities to develop on-going partnerships with Provincial Government departments, universities and non-profits to refine, maintain and update the key datasets needed to understand the health of the Region's ecosystems, wildlife populations and wildlife movement corridors, including the spread of invasive species.	Guidance
33	Community Shaping	Consider the preservation and creation of natural connections to the Chebucto Peninsula when planning the development of the Ragged Lake Business Park.	Guidance
41	Community Shaping	When updating the <i>Municipal Design Guidelines</i> (Red Book) consider and accommodate wildlife crossings when impacts on essential and important corridors cannot be avoided.	1-2 Years
60	Outdoor Recreation	Continue to study and consider the adoption of infrastructure charges to support the development and improvement of parks and recreation facilities that are needed to support new development.	1-2 Years
69	Outdoor Recreation	Continue to implement the approved Cole Harbour Basin Open Space Plan.	1-7 Years

ACTION #	THEME	ACTION	DIRECTION
70	Outdoor Recreation	Use the HGNP and other municipal plans, including the AT Priority Plan and Integrated Mobility Plan (IMP) to establish linkages between parks, Provincial Wilderness Areas, crown lands, fresh waterbodies and ocean fronts that are used for recreation purposes.	Guidance
71	Cultural Landscapes	Use the <i>Cultural Landscape Framework Study</i> as the guiding document for the consideration of potential cultural landscapes and the basis for a future cultural landscape program to be advanced through the <i>Culture and Heritage Priorities Plan</i> .	2-4 Years
75	Cultural Landscapes	Maintain and enrich the inventory of potential cultural landscapes identified in the <i>Cultural Landscape Framework Study</i> through planning initiatives, community engagement and other Municipal initiatives.	Guidance
78	Cultural Landscapes	Proactively engage and expand the inventory of cultural landscapes of interest to African Nova Scotian, Mi'kmaq, Acadian and immigrant communities.	2-4 Years
79	Cultural Landscapes	Engage groups that have traditionally been underrepresented in planning initiatives, including African Nova Scotian, Mi'kmaq, Acadian, and immigrant communities, when developing cultural landscape plans and policies.	Guidance



6.4 PARTNERSHIPS

While the Municipality is a key government body in the Region, responsibility for managing the environment is shared between multiple levels of government, including Nova Scotia Environment and the Provincial Department of Natural Resources. Universities, non-profits and community groups also bring valuable expertise, information and resources to conservation efforts. Private landowners play an integral role in stewarding natural resources and investing in sustainable development approaches. The cultivation of partnerships, therefore, is important to carrying out many of the objectives identified in this Plan.

Timeframe

The cultivation of meaningful partnerships takes time and requires an on-going commitment. Work related to partnerships are expected to build on the Municipality's existing relationships and potentially develop into formal partnership initiatives over the long-term. Some related action items are to be completed over the next 1-7 years.


Budget and Resource Implications

Exploring partnership opportunities can be carried out with existing resources as opportunities arise as part of on-going business unit work. However, there is currently little capacity to proactively lead or

meaningfully contribute to new partnership initiatives. Consequently, some partnership opportunities may require a future Municipal investment, such as establishing a monitoring program in partnership with research institutions. Specific investments in partnerships will be considered through annual business planning cycles or Council reports depending on the level of commitment and nature of the partnership opportunity.

ACTION #	THEME	ACTION	DIRECTION
11	Ecology	Work with Halifax Water and Nova Scotia Environment to establish stormwater management guidelines to improve the quality of stormwater runoff.	2-4 Years
12	Ecology	Work with Halifax Water and Nova Scotia Environment to promote green infrastructure, such as naturalized stormwater retention ponds and bioswales, as the preferred approach to managing stormwater.	4-7 Years
13	Ecology	Work with Halifax Water to develop a green infrastructure specification document to guide and promote the use of low-impact design approaches to manage stormwater on private property for multi-unit residential, commercial and industrial developments.	2-4 Years
18	Ecology	Formally request that the Province amend the <i>Halifax Regional Municipality Charter</i> to enable the Municipality to acquire sensitive environmental lands (e.g. riparian areas, wetlands, steep slopes, etc.) as an environmental reserve through the land development and subdivision process, in addition to existing parkland dedication provisions.	1-2 Years
34	Community Shaping	Work with the Nova Scotia Department of Transportation and Infrastructure Renewal, as opportunities arise, to identify opportunities to construct wildlife crossings under Highway 103 and the planned Highway 113.	Guidance
38	Community Shaping	Work with the Province and utility companies when opportunities arise to locate trails within existing and planned transportation and utility corridors.	Guidance
39	Community Shaping	Work with the Province to mitigate the impacts on essential and important corridors and valued ecological open spaces when designing new regional transportation projects.	Guidance
40	Community Shaping	Work with the Province to reconnect fragmented landscapes with crossing structures (wildlife overpasses and underpasses) when repairing or expanding existing roads and linear infrastructure.	Guidance
61	Outdoor Recreation	Formally request that the Province amend the <i>Halifax Regional Municipality Charter</i> to enable a greater range of legislative abilities, such as the ability to enact parkland dedication requirements based on density to address development that does not include the subdivision of lots.	1-2 Years
63	Outdoor Recreation	As opportunities arise, coordinate with Provincial and Federal governments and conservation groups to establish a nature park network.	Guidance
65	Outdoor Recreation	For other future Nature Parks and other open spaces that are already largely in public ownership, continue to work with the Province and other stakeholders respecting their delineation of boundaries, planning and programming.	Guidance

ACTION #	THEME	ACTION	DIRECTION
68	Outdoor Recreation	In conjunction with any Provincial initiative consider open space and parkland opportunities in the Wrights Lake area as they arise.	Guidance
72	Cultural Landscapes	Engage with the Province as they update the <i>Heritage Property Act</i> to include policies on the registration of cultural landscapes.	2-4 Years
77	Cultural Landscapes	Work with the Province to update the accuracy and use of the Areas of Elevated Archaeological Potential Map contained in the <i>Regional Plan</i> .	2-7 Years



7 APPENDIX A: Approach to Park Network Service Delivery

Introduction

There are no uniformly accepted standards for determining the ideal levels of service for parks. National benchmarks provide broad information that can be used to make comparisons with other jurisdictions about the adequacy of parkland within municipalities. However, such benchmarking often illustrates that the provision of parkland varies considerably between municipalities. Therefore, the actual amount and type of parkland that may be suitable for a specific municipality requires the consideration of local conditions including settlement patterns, access through roads and other means of travel, population density and distribution, demographic profiles, and recreation usage. Community consultation is key to understanding how many of these factors lead to preferences that are placed on the provision of parkland.

The Regional Plan characterizes several broad community settlement patterns at a regional scale for planning purposes. Using this as a basis, the following approach for the provision of parkland serves as a preliminary guide for future work that should include community consultation.

Local Parkland Needs

Local parkland needs are partially dependant upon settlement patterns. In more dense areas, where dwellings have limited amenity area, there is a greater reliance on readily accessible parkland to meet outdoor recreation needs. In less dense areas, with greater opportunities for private (backyard) outdoor recreation amenities, there may be less of a reliance on parkland to meet needs. The densities of settlements are also contributing factors to the success of such parks in being overused or appropriately-sized active places for play and community gathering. As much as the provision of too little parkland can be an issue in a dense settlement, too much parkland in a dispersed settlement can result in underutilized spaces and difficulties in providing quality amenities in centralized parks.

Based on the Regional Plan designations and the current settlement patterns that exist within them, the following are identified as broad service level distance/travel time standards to parks:

- **Regional Centre:** 500m (6 minute walk/2 minute cycle).
- **Urban Settlement area outside the Regional Centre:** 800m (10 minute walk/3 minute cycle).
- **Rural Commuter:** Concentrate parks in Local Centres and Growth Centres as identified in the Regional Plan, in centralized locations within large subdivision developments, and co-locate with existing community facilities and schools.
- **Rural Areas:** Concentrate parks in Growth Centres as identified in the Regional Plan, and co-locate with existing community facilities and schools.

These distance standards meet the parkland-access needs of over 85 percent of dwellings in the Regional Centre and Urban Settlement areas; a percentage which may be used as a suitable service target for planning purposes.

Within the specified service delivery distances, parkland needs to be of sufficient size and quality to support local needs. The number of dwelling units and settlement density are factors to consider.


Through further analysis it may be determined that some areas may be over-serviced while others may be under-serviced. Over-serviced areas should be assessed to determine if parks are suitable for naturalization or divestment. Resultant funds can be used to improve other local parks within the same service area. In under-serviced areas, the Municipality may need to focus on acquiring new local parkland and improving existing parks. Where subdivision resulting in parkland dedication is not prevalent, in addition to capital budget funding, the municipality should look towards possible development charges and density bonuses as well as changes to legislation to support dedication requirements based on the number of new dwelling units.

Higher Order Parks and Nature Parks

It is recognized that in addition to local parks, higher order parks such as district and regional parks, which includes nature parks, are necessary to meet parkland needs of residents. In some cases, large master plan communities will provide higher order parks, but for the most part such parkland and nature parks need to be provided by the Municipality and other levels of government. Such parkland needs to be within reasonable travel distance, but similar standards that might exist for local parks are not necessarily useful or readily applicable. The provision of such parkland needs to be considered from a network and community service catchment perspective, among other factors.

Funds for land acquisition and improvement should be derived from capital budget funding and development charges.

Following further analysis and consultation, the approach identified above could lead to policies and possible amendments to the Municipality's parkland dedication requirements.

The background of the slide is a close-up photograph of green leaves. Several water droplets are visible on the leaf surfaces, reflecting light. The leaves have a prominent network of veins. The overall color palette is various shades of green, from light lime to a deeper forest green.

8 APPENDIX B: Land Capability Analysis Tool

8.1 INTRODUCTION

Parks are public open spaces, comprised of natural and human-influenced features, for people to gather and recreate. Parks help define and shape communities and may also serve to conserve ecological systems. Outside of the subdivision parkland dedication process, the municipality's land acquisition, repurpose, and disposal process requires assessments and ultimately decisions by Regional Council.

8.2 PURPOSE

The proposed Land Capability Analysis Tool, outlined in this Section, is to evaluate existing and proposed parkland by measuring values within the themes of Identity, Heritage Conservation, Recreation Land Use, Natural Systems Conservation, and Connectivity. It is to be used in conjunction with other analyses regarding matters such as:

- » community needs
- » demographic profiles
- » opportunities for partnerships
- » environmental conditions
- » existing parks

8.3 LAND CAPABILITY ANALYSIS TOOL

Evaluation of existing or potential parkland should consider the significance of an asset at an appropriate scale(s), from local to regional. Scores from 0-3 are assigned for each theme section, for a final score out of 24 points. A public access and influence multiplier is then applied to the final score (see 7.3.6). Scores less than 40% are considered a fail, 40-60% are marginal, and over 60% are a pass. Scores are to be used in conjunction with the investment/divestment decision factors listed in 7.2. For example, an existing park may have a failing score, but may be influenced by other factors such as a strong need for the space in the community. A final consideration is whether improvements to land are warranted, which in turn may improve scores. The assignment of scores requires a comparison of the relative value of other parks within HRM.

CPTED (Crime Prevention Through Environmental Design) principles should be considered where appropriate (i.e. Sections 7.3.1; 7.3.3; 7.3.5).

8.3.1 Identity (sense of place)

Evaluates the general site from the perspective of human experience and context due to the presence of unique natural and human influenced characteristics, familiar awareness, and for the sense of belonging once you have arrived. It evaluates the site's capability to present opportunity for social cohesion, stewardship, facilitation of frequent visits, and minimal nuisances to the neighbourhood, like noise, light, traffic, crime, etc.

- 0** *Unique characteristics do not exist, awareness of location is low, nuisance could be an issue and there is little sense of belonging. The site presents elements for social conflict and has difficulty attracting people and stewardship efforts.*
- 1** *Few unique characteristics exist, awareness of its location is good, but nuisance issues may be a problem and sense of belonging is low. The site presents few elements for social cohesion, and attracts only infrequent use and stewardship efforts.*
- 2** *Some unique characteristics exist, awareness of location is good, nuisance issues are moderate and sense of belonging is moderate. The site presents several elements for social cohesion and attracts moderate use and stewardship efforts.*
- 3** *Several unique characteristics exist, awareness of location is obvious, and sense of belonging is high. The site presents multiple elements for social cohesion and attracts moderate to high use and stewardship efforts.*

8.3.2 Heritage Conservation

Evaluates the site for its ability to perform a naturally influenced heritage function contributing to the area's landscape character with representative indigenous forest, natural watercourses, and resource, and/or geological formation. And, for the site's ability to perform a culturally influenced heritage function as a gathering place for recreation, educational, institutional, transportation, agricultural, spiritual, inspirational and/or housing settlement purposes.

a. Natural Heritage

Evidence of adjacent or integrated indigenous landscape character features such as native old growth forest, natural wetland, natural water course, natural shoreline, and/or rock outcrop.

- 0** *No evidence of indigenous landscape character features.*
- 1** *Minor evidence of indigenous landscape character features.*
- 2** *Moderate evidence of indigenous landscape character features.*
- 3** *Significant evidence of indigenous landscape character features.*

b. Cultural Heritage

Evidence of adjacent or integrated social gathering places such as historic land grants, historical travel routes, modern day image routes, look-offs, cemeteries, foundations, buildings, nautical, agricultural, recreational, or institutional based.

- 0** *No nearby evidence of social gathering places.*
- 1** *Minor evidence (1 feature) of adjacent social gathering places.*
- 2** *Moderate evidence (2-3 features) of adjacent social gathering places.*
- 3** *Significant evidence (4+ features) of adjacent or integrated social gathering places.*

8.3.3 Recreation Land Use

Evaluates the quality of the land for its ability to support universal design for recreation service delivery and the land's functional capability for carrying capacity of people and assets, plus civic programming versatility for daily activities such as recreation and active transportation; seasonal activities such as civic celebrations and parades; and emergency response activities such as muster stations or medical treatment.

a. Land Character

Accommodates universal design principles. Evaluates the dimensions, road frontage, and curb length, location, topography, hydrology, and vegetation.

- 0** *The land does not meet standards and could not be economically engineered suitable for public use.*
- 1** *The land is sub-standard but could be added to and engineered for intended public land use programming.*
- 2** *The land meets standard requirements and can be engineered for intended public land use programming.*
- 3** *The land exceeds standard requirements and can be engineered for intended public land use programming.*

b. Land Capacity (resilience)

Evaluates the land for its ability to sustain (accommodate) a range of visitation intensities on a regular basis, while satisfactorily serving its intended purpose and avoiding over-crowding.

- 0 *The land capacity is very low and could be decommissioned.*
- 1 *The land can accommodate a limited number of people and assets at one time while still serving its intended purpose. Crowding may become a concern.*
- 2 *The land can accommodate a moderate number of people at one time while still serving its intended purpose. Crowding is unlikely.*
- 3 *The land can accommodate high levels of public use at one time while still serving its intended purpose. Crowding is not a concern.*

c. Program Versatility

Evaluates the land for its ability to accommodate a variety of programs (sport, active transportation, leisure, water access, nature and cultural interpretation, etc), and be easily repurposed depending on land use and programming trends.

- 0 *The land is not versatile and not easily repurposed.*
- 1 *The land has low versatility and can only accommodate 1 or 2 programs at one time depending on demographic profile and current trends. Not easy to repurpose.*
- 2 *The land has moderate versatility and can accommodate 2 or 3 programs at one time depending on demographic profile and current trends. Possible to repurpose.*
- 3 *The land is very versatile and can accommodate 3 or more programs at one time depending on demographic profile and current trends. Easily repurposed.*

8.3.4 Natural Systems Conservation

The natural influences on the site are evaluated for capability to sustain an ecological system. Land form, surficial geology, plus evidence of land and aquatic habitat diversity, richness, and species at risk in flora, stationary and migratory fauna, are considered. In terms of human influence and built form footprint, recreation program intensification, opportunities for low impact design features such as permeable concrete and more natural storm water run-off control are taken into consideration.

- 0 *The site does not present an area to sustain natural habitat succession, diversity, richness or species at risk. Does not integrate low impact design principles for natural habitat conservation (forest, stream day-lighting), and is entirely manicured. Largely an isolated patch with no opportunity for animal migration.*
- 1 *The site integrates minimal area (approx. 25%) to sustain natural habitat succession, diversity, richness or species at risk. Minimal integration of low impact design principles for natural habitat conservation, and is mostly manicured. Largely an isolated patch with minimal opportunity for animal migration.*
- 2 *The site integrates moderate areas (approx. 50%) to sustain natural habitat succession, diversity, richness or species at risk. Moderate integration of low impact design principles for natural habitat conservation, and is only partially manicured. Likely to function as a separated patch of a larger natural system with moderate opportunity for animal migration.*
- 3 *The site integrates many areas (50% plus) to sustain natural habitat succession, diversity, richness or species at risk. High integration of low impact design principles for natural habitat conservation, and has few manicured areas. Land functions as a connected component of a larger natural system of lands and/or waters with high opportunity for animal migration.*

8.3.5 Connectivity (Context and Access)

The location of the site is evaluated for the ability to connect people and function as part of a complete community; for its ability to influence investment in pedestrian, cyclist, transit user, and motorist connectivity; and for the convenience of way-finding in the journey there.

- 0** *The site is not connected, and lacks context with nearby public realm due to barriers (private property, geological constraints, engineered infrastructure) and configuration (narrow road frontage, flag lot). Has no potential to influence built form investment.*
- 1** *The site is not well connected with corridors, does not have a well-defined public realm, and has only limited potential for greater connectivity. Some barriers like private property or engineered infrastructure may exist. Has minimal potential to influence connectivity built form investment.*
- 2** *The site is well connected and an integral part of a patchwork network accessible by several corridors and has a well-defined public realm. Has moderate potential to influence connectivity built form investment.*
- 3** *The site is very well connected and an integral part of a corridor network that is accessible by many corridors and has a very well-defined public realm. Has high potential to influence connectivity built form investment.*

8.3.6 Public Access and Influence

A scoring criteria multiplier is applied to the final score which reflects year-round public access to the site.

- x 0.5 :** *Residents do not have access and influence over entering the park. The land is owned by a private agency (institution, utility) and residents require the permission of the owner, and may be required to pay user fees to access the land.*
- x 0.75 :** *Residents have limited access and influence over entering the park. The land may be owned by a public agency (institution, utility), but the public has limited access and control due to imposed time constraints, gates, or user fees.*
- x 1.0 :** *Residents have access and influence over entering the park. The land is owned by municipal government and the public has the control to access the land without permission, but in accordance with local by-laws.*

The background of the slide is a close-up photograph of green leaves. Several water droplets are visible on the leaf surfaces, reflecting light. The leaves have a prominent network of veins. The overall color palette is various shades of green, from light lime to deep forest green.

9 Appendix C: Glossary

Accessibility

The degree to which an open space can be accessed. Although closely related to the definition of access, accessibility often relates more specifically to the ability of persons with cognitive or physical disabilities to access or use an open space or its amenities.

Active Recreation

Areas that accommodate moderate to high intensity use and require modification of natural landforms and the provision of facilities (e.g. play fields, multipurpose centres).

Active Transportation

Human powered, personal travel chosen as an alternative to motorized travel; includes walking, running, hiking, cycling, the use of a wheelchair, cross-country skis, skateboard, or canoe or kayak on the water.

Aggregate Quarries

Stone, sand or gravel mining operations.

As-of-right development

Development complies with all applicable zoning regulations and does not require any discretionary action by Regional Council.

Biodiversity

The variety and variability of species within an ecosystem.

Biophysical

Refers to the living and non-living natural environment of the Region.

Bioswale

Gently sloped, vegetated channel engineered primarily for stormwater retention and filtration. Bioswales are commonly associated with Low Impact Development, and sometimes complete streets.

Bonus Zoning Program

An increase in built area in exchange for public amenities and/or benefits that contribute to the livability and proper planning of the neighbourhood affected by the resulting increase in density.

Buffer

Low-impact land uses surrounding core biodiversity areas, providing a separation between more intensive human uses.

Carbon Sinks

A forest, waterbody or other natural environment that helps absorb carbon dioxide from the atmosphere.

Conservation

Protection or restoration of the natural environment, natural ecosystems, archaeological resources, historical sites and cultural landscapes.

Conservation Design Development

Standards for rural subdivisions, which minimize the impact of rural development by conserving important environmental and cultural assets.

Connectivity

The degree to which a landscape facilitates or impedes movement among habitat and natural areas. Connectivity may be provided through corridors, stepping stones or compatible adjacent land uses.

Core

A component of the green network that serves a critical role for a specific function or species, such as a centrally located community park (providing an important activity hub for the neighbourhood) or large natural area (providing key breeding habitat for birds and amphibians).

Corridor

A linear connection that facilitates through-movement across the landscape such as a naturally influenced corridor (greenways, river) or a human influenced corridor (rail, utility, road). Some corridors are contiguous (physically connected), while others are linear series of spaces (stepping stones). The loss of corridors would severely compromise the connectivity of the broader landscape.

Cultural Landscapes

Distinct areas, taking any shape, that provide recognizable character and cultural identity and reflect the human interaction with the land over time.

Eco-tourism

Tourism directed to natural environments to support conservation efforts and observe wildlife.

Ecosystem

A biological community of interacting organisms and their physical environment.

Edible Landscaping

Use of food producing plants in the urban landscape.

Environmental Reserve

Allows the Municipality to acquire environmentally sensitive land that does not have to be designated as a park through the development process.

Food Security

Reliable supply and access to a sufficient quantity of affordable, nutritious food.

Green Infrastructure

A network of natural and semi-natural engineered landscape elements designed to provide products and services such as stormwater management, water filtration and improved air quality.

Green Network

An interconnected system of open spaces with multiple functions from an ecological, working landscape, recreation and mobility, community shaping and cultural landscapes perspective.

Greenfield Development

Land development of agricultural or natural areas that have not previously been developed.

Greenway

A linear open space established along either a natural corridor (riverfront, stream valley or ridgeline) or a human influenced corridor (railroad right-of-way, canal, scenic road). It is a natural or landscaped course offering mobility options while connecting parks, nature reserves, cultural features, or communities.

Growth Centres

Locations identified in the *Regional Plan* to accommodate increased population growth, development density and a concentration of services.

Halifax Regional Municipality Charter

A Provincial statute that grants the Municipality broad authority and tools to enact Municipal policies and regulations.

Important Corridor

A band of natural vegetation that connects important core habitats.

Invasive Species

A plant, fungus or animal that is not native to the Region and has a tendency to spread and cause damage to the environment, economy or human health.

Land Use By-laws (LUBs)

Regulate the use of land through zoning and can establish a wide range of development standards such as allowable heights and densities to landscaping requirements. LUBs have significant influence on community design and form. Where an MPS has been adopted, there is a corresponding LUB. All lands in the Halifax region have a governing MPS and LUB.

Marine aquaculture

The raising and harvesting of species that live in the ocean.

Open Space

Publicly or privately owned, undeveloped land or water, intended to be preserved for agricultural, forest, community form, ecological, historical, public safety or recreational purposes. It consists of lands for natural resources, agriculture, recreation, environmentally sensitive areas, hazard prone lands, cultural landscapes, natural corridors and trails and preservation areas for potable water and waste/resource management.

Park Dedication

Means a useable parcel of land for public recreation purposes, equivalent value, or a combination of land and equivalent value, as part of a subdivision.

Passive Recreation

Recreational opportunities that require minimal development or facilities and have minimal

environmental impact (e.g. walking, paddling and nature observation).

Patches

A contiguous, unfragmented area of natural vegetation or small, discontinuous natural areas, used by wildlife during longer movements between core habitats.

Potable water

Safe water to drink.

Regulatory Tools

Regulatory tools such as development agreements, rezonings and site plan approvals which may be established by policy provisions under MPSs and LUBs in accordance with the provisions of the HRM Charter to allow for discretionary approvals by Regional Council or Community Councils.

Resiliency

Able to withstand, recover and persist in the face of a shock or stress upon the system, such as climate change, disease or flooding. Resilience may involve adaptation over time to create a system that better withstands future stresses or shocks.

Riparian

The area adjacent to the banks of a river, stream, lake, wetland, coast or other water body.

Rock Barren

Areas characterized by bare rocks that have been shaped by glacial processes.

Sensitive Landforms

Vulnerable, delicate, rare and/or valuable (from an aesthetic, ecological or cultural perspective) geological formations that may be significantly impacted or modified by development and uses in the landscape.

Social Cohesion

The willingness of members of a society to cooperate with each other (i.e. a sense of community).

Surficial Geology

The surface structure of the earth .

Sustainable

Meeting the Region's environmental, economic, social and cultural needs without compromising the ability of future generations of regional residents to meet their needs.

The Regional Plan

The Regional Municipal Planning Strategy for Halifax that provides policies to direct how the Halifax Regional Municipality will develop and grow to 2031.

Urban Agriculture

The use of a structure or land for the breeding, planting, cultivation, or harvesting of plants, excluding

cannabis, such as vegetables, fruits, herbs, sprouts, and ornamental plants and flowers.

Urban Forest

Every tree within the city. It includes all the trees in urban communities, including those in parks, along streets and trails, in natural areas and on private property.

Urban Service Boundary

Encompasses areas where Municipal approval for serviced development has been granted and to undeveloped lands to be considered for serviced development.

Watershed

An area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake or groundwater.

Wayfinding

Signage, cartographic materials and design techniques that provide information about location, orientation and surroundings in order to support navigation around the city.

