

NATURAL LEGACY

Good planning decisions now will ensure our natural environment is protected, balancing needs today with the greater good for generations into the future.



Natural Legacy Project Steps

- Understand Natural Legacy in Bruce County and information available or needed to help with mapping and managing
- Set Targets for Natural Legacy features and areas that can be identified in a Natural Environment System - with both natural heritage and water resources systems
- Identify and engage on approach and options to meet targets
- Identify policy directions to support implementation

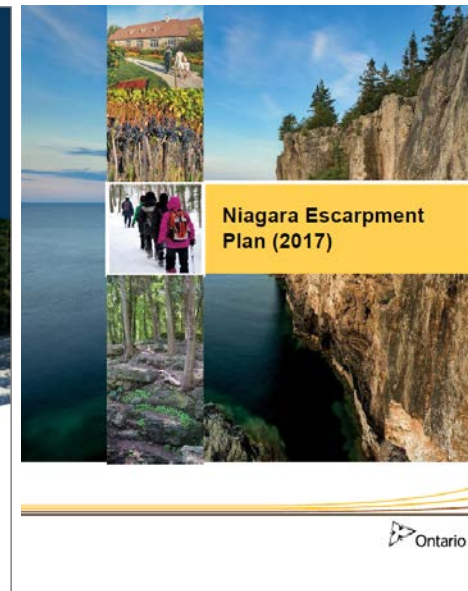
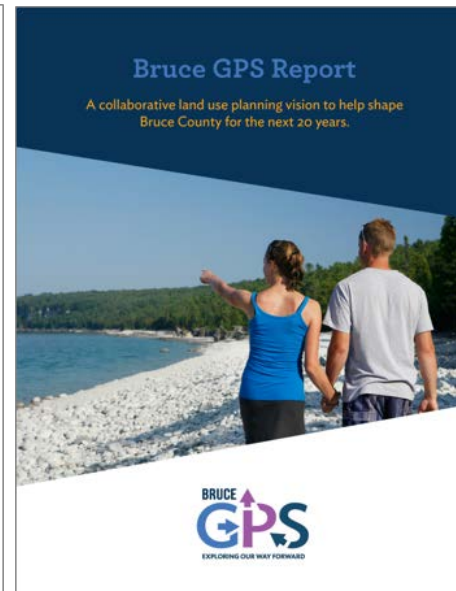
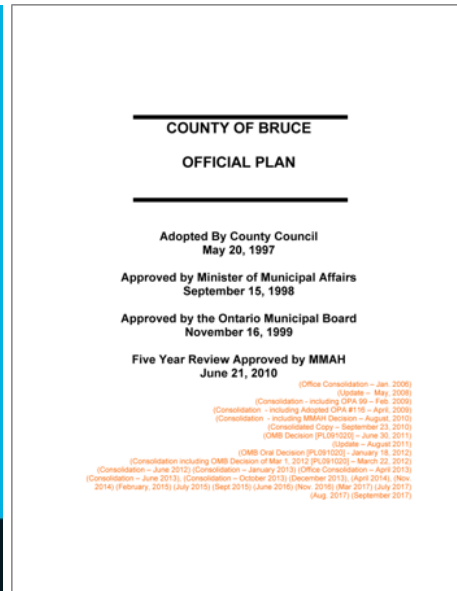
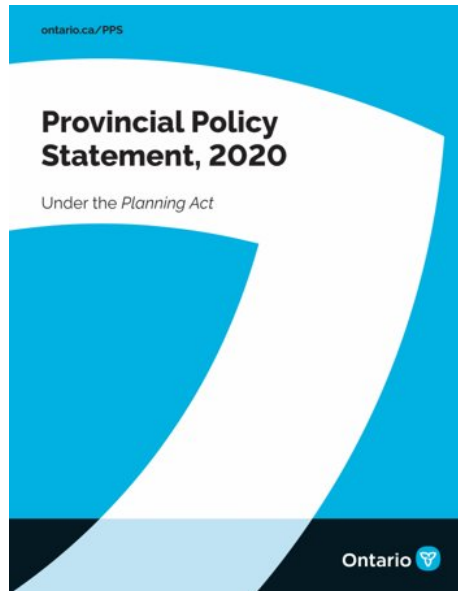
north-south
ENVIRONMENTAL

ecosystem
recovery inc.
PROFESSIONAL ENGINEERS

MERIDIAN
PLANNING



Planning Context



Natural Legacy - Bruce GPS Summary

- Bruce County has rich natural resources: good soil, sand and gravel, groundwater, clean beaches, forests.
- Long term sustainability needs management
- Management requires identifying where most important resources are and what they need
- Management Options can include, depending on the resource, preservation, creating distance between the resource and new development, and management to maintain or increase value.
- Plans are needed to ensure that combined effects of change preserve natural assets and positively impact our future.
- Need to also address concerns of property owners regarding how zoning changes may affect development rights and property values.

Bruce Natural Legacy

WETLANDS

Northern Bruce:



Southern Bruce:



Combined:



WOODLANDS

Northern Bruce:



Southern Bruce:



Combined:



CONSERVATION ORIENTED LANDS

~54000

hectares - or **13.5%** of the County- are owned or managed for conservation purposes, largely on the Peninsula

BIODIVERSITY



Home to
2000+ species

Species at Risk with occurrence records in Bruce County. Includes Endangered, Threatened and Special Concern Species (per COSEWIC and SARO)

65

Total

62

are listed
federally

57

are listed
provincially



Many species in Bruce County have **restricted geographies** (e.g., the Peninsula, Great Lakes) and may be abundant here but are rare elsewhere.

RARE AND UNCOMMON HABITATS

12 rare vegetation communities.

5 are **Alvar** community types



Alvars are a very rare habitat type and those in Bruce County are **globally recognized**

>60

Alvar sites known to occur in Bruce County, largely associated with the Peninsula



Bruce Peninsula boasts the **largest representation** of alvars in Ontario



Alvars of Bruce County support **>400 species**, many of them rare and listed Species at Risk in Ontario and Federally.

3

are cliff
community
types

3

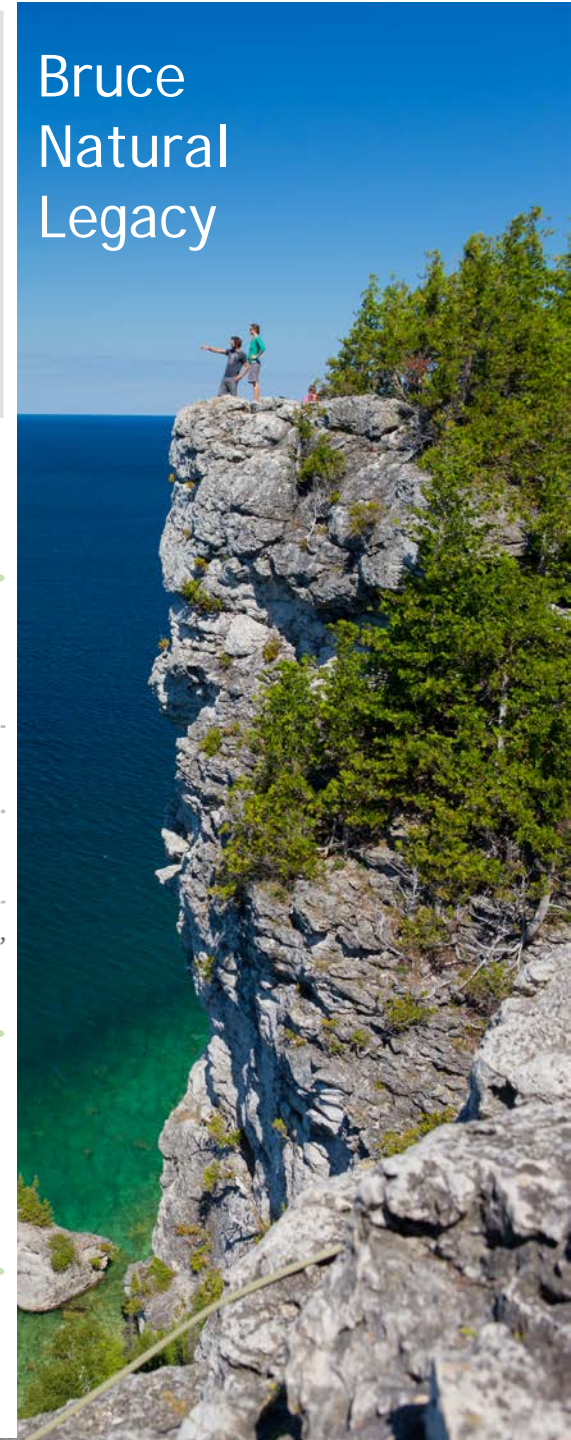
are sand dune
& sand barren
community
types

1

is a coastal
wetland
community
type



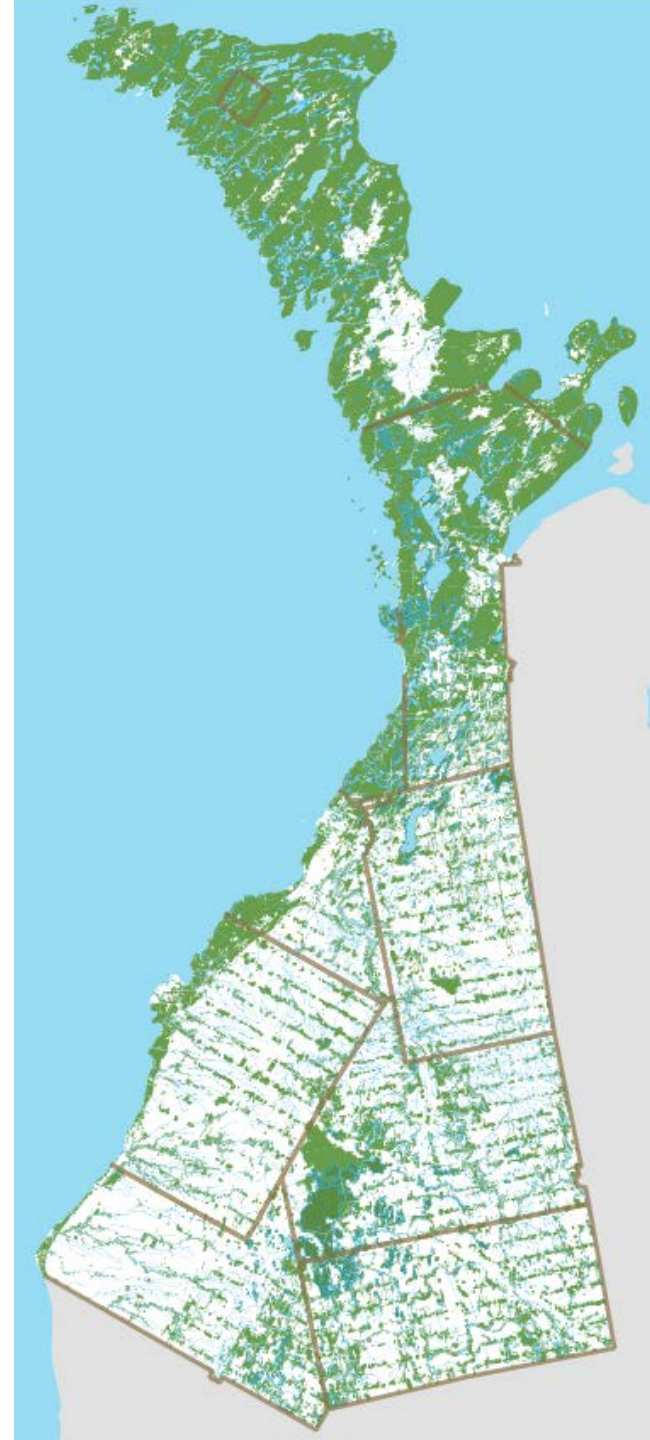
The Huron Fringe and Cabot Head are important areas for birds and their migration.



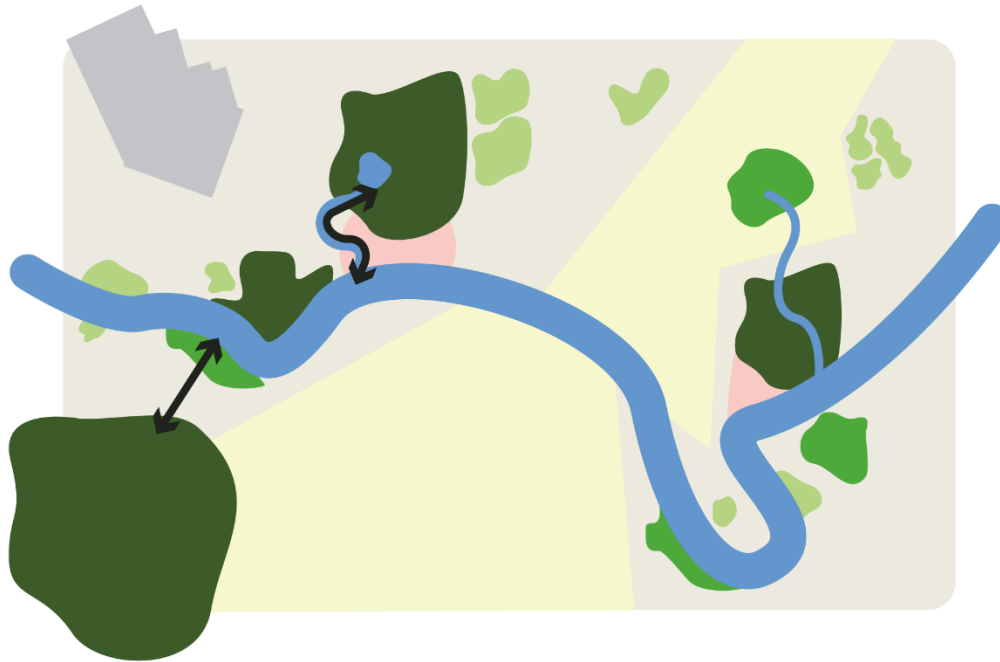
NHS Approaches

Recommend different approaches for the natural heritage system in Northern Bruce County (the Municipality of Northern Bruce Peninsula and the Town of South Bruce Peninsula) and Southern Bruce County (the other Municipalities in Bruce County), while noting that the **shoreline** in Southern Bruce County also has important habitats and bird migration functions.

This approach aligns with a significant observed north-south shift in the County landscape and offers advantages for policy implementation and monitoring.



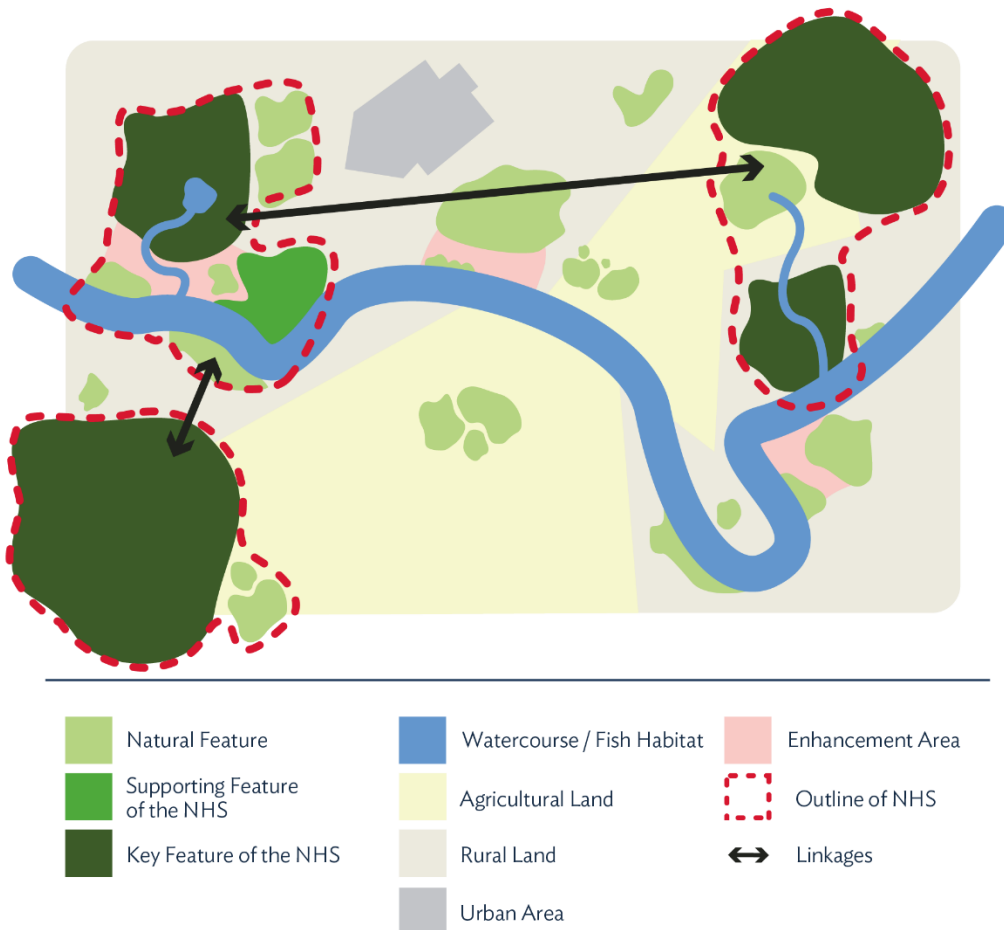
Features-Based System Approach - Southern Bruce County



- Uses Key and Supporting features and areas, enhancement areas and linkages as the building blocks for the N.H.S.
- This approach is most used in areas of lower natural cover and/or where natural features are more fragmented across the landscape (e.g., southwestern Ontario).



Core Areas-Based System Approach - Northern Bruce County



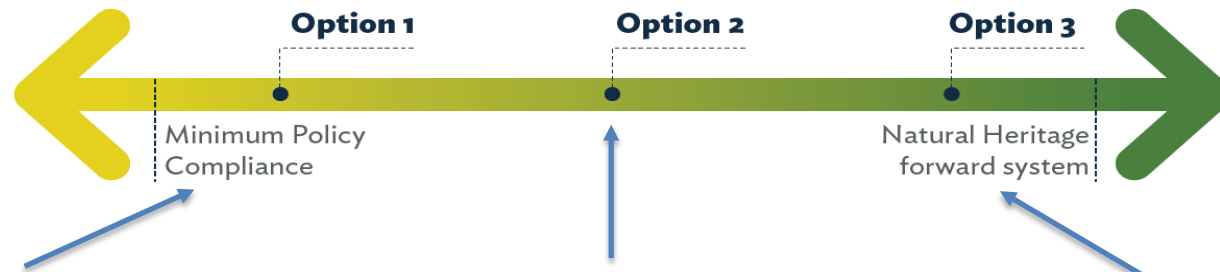
- Include areas where key features and areas are concentrated or to conserve representative or significant portions of natural areas in a largely intact natural landscape.
- Core areas connected by linkages
- Identified using several criteria, key among them being percent natural cover and size.
- Best applied where there is substantial natural cover on the landscape, or where an N.H.S is being defined for a very broad geographic scale.



BRUCE
county

NHS Options

Visual Representation of Options for the Natural Environment System



Presents a basic system that is consistent with the P.P.S and has been informed by analyses of cover in Bruce County.

Builds on Option 1, with additional Supporting Features and Areas and criteria for features that identifies a greater proportion of them as Key Features for the System

Builds on Options 1 and 2 to illustrate a 'natural heritage forward' system. Criteria for this option include a greater proportion of features as Key Features and/or include additional Supporting Features and Areas.

Water Resources System Approach

Includes areas necessary to protect drinking water supplies, areas of hydrological significance and identification of vulnerable and/or sensitive groundwater and surface water features that should be protected, mitigated, or enhanced in land use planning.

Recommend: common
approach to Water Resources
System across Bruce County



Water Resources System Options

- **Option 1** includes Key Hydrologic Features and Key Hydrologic Areas.
- **Option 2** Option 1 plus 'other components', including water-related natural hazards as part of the Water Resource System.

Not all features or options are fully mapped, so:

some components would be mapped, and others would be included conceptually in the system.



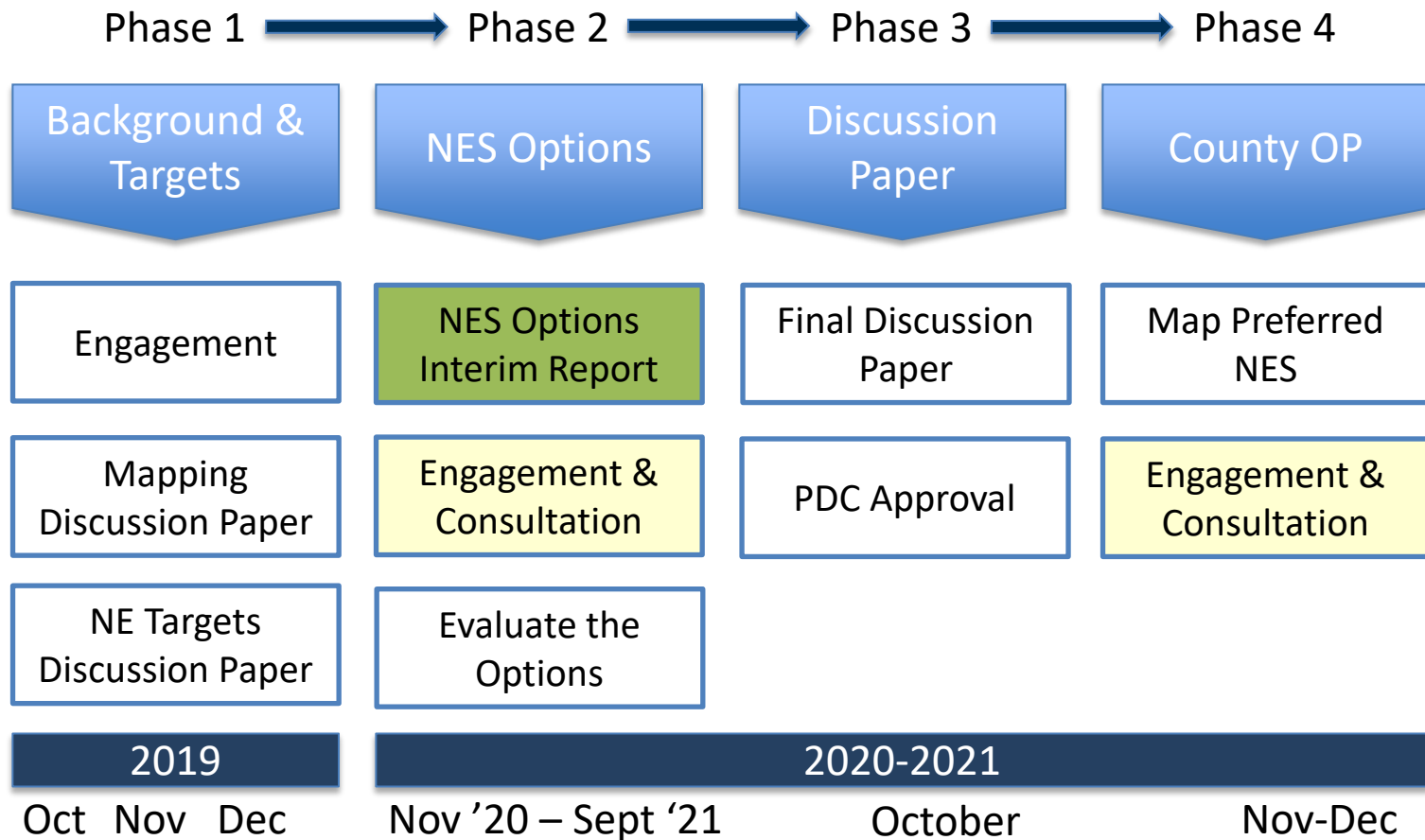
Policy Directions

| Topic | No. | Recommended Direction |
|---|-----|--|
| Update Environmental Impact Study (EIS) Guidelines | 1 | Review and update EIS Guidelines to include guidelines for scoping, and standardization of reports to increase consistency of information. |
| Make it easier to link mapping and policy | 2 | Tying policy to mapping in a very close and relatable way, through summaries on schedules and in GIS / interactive formats. |
| Provide essential material in accessible formats | 3 | Focused writing / policies that provide the essential informational material |
| Focus policy on overall direction and use guidelines for the details | 4 | Role of policy to set a basic standard and provide (guidelines) for minimum mitigation measures options / best practices for enhancement. |
| Consider a community planning development permit system for improved implementation | 5 | County OP consider policies for a Community Planning Permit system which can provide improved implementation tools. |

Policy Directions

| Topic | No. | Recommended Direction |
|---|-----|---|
| Use different forestry tools for different areas | 6 | Permit different permit types in different areas of the system while managing wildland fire risk. |
| Enhance progressive rehabilitation when aggregate extraction occurs within the Natural Environment System | 7 | Reduce the duration of disruption to the natural system by requiring best practices in progressive rehabilitation for aggregate extraction within the natural environment system. |
| Include conceptual natural legacy mapping in settlement areas | 8 | Identify key features and support the county-scale system while recognizing that local municipalities may develop defined and refined natural legacy mapping. |
| Encourage planning for sustainable public access to natural legacy features | 9 | Together with the 'Communities' 'Culture' and 'Business' discussion papers, support development of sustainable opportunities for people to connect to our natural legacy. |

Work Plan



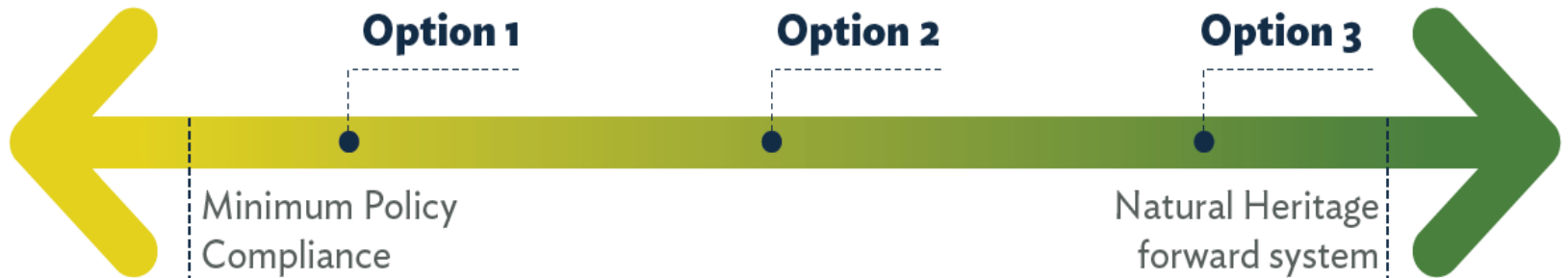
Communication and Engagement:

- Social media posts to generate traffic to the project website
- Information and engagement tools on the project website at www.planthebruce.ca
 - 127 responses to shorter stakeholder survey
 - 10 responses to long-form detailed stakeholder survey including from several local municipalities

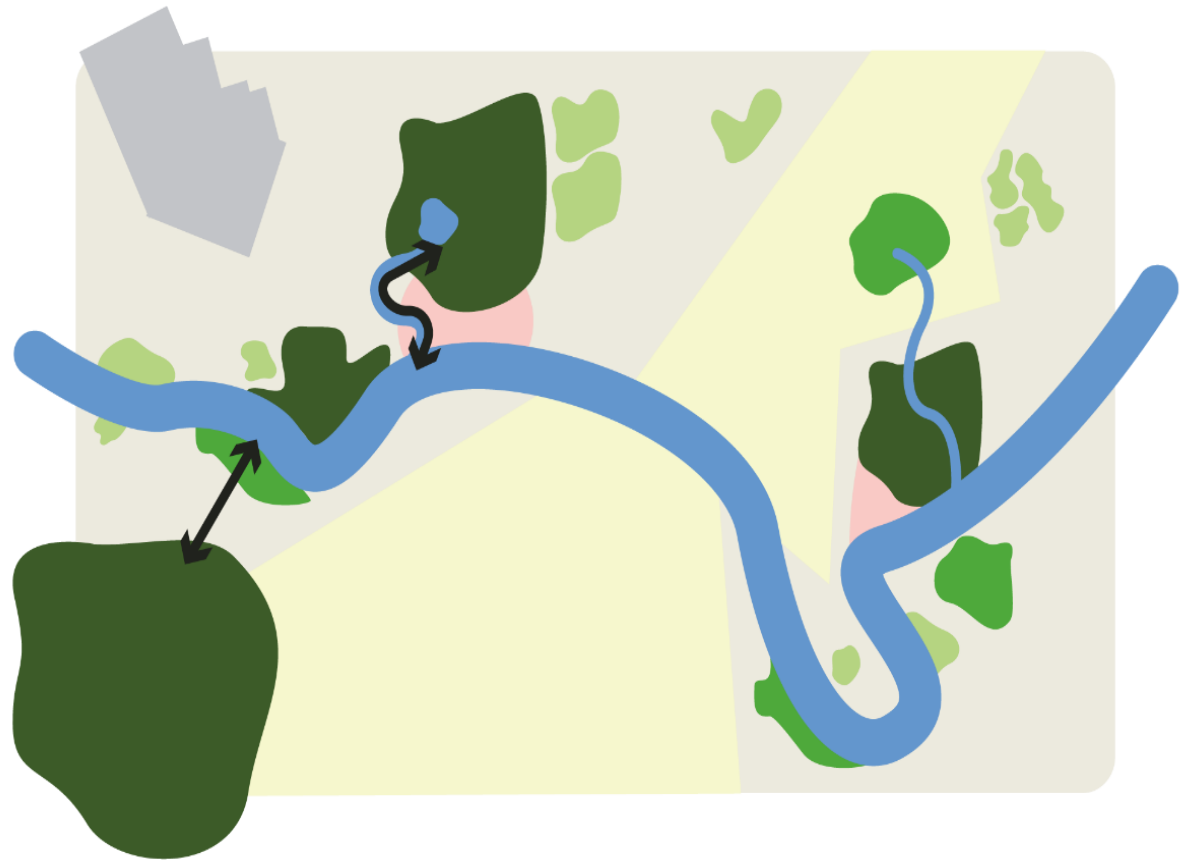


Where do you see Brockton landing on the scale of options?

Visual Representation of Options for the Natural Environment System



Does the features and linkages approach resonate with you?



| | | | | | |
|---|-------------------------------|---|----------------------------|---|------------------|
|  | Natural Feature |  | Watercourse / Fish Habitat |  | Enhancement Area |
|  | Supporting Feature of the NHS |  | Agricultural Land |  | Urban Area |
|  | Key Feature of the NHS |  | Rural Land |  | Linkages |

What do you think of the 9 initial policy directions?

| Appendix: Features and Areas to be Mapped in the Natural Environment System | Notes |
|---|---|
| Provincially Significant Wetlands (including Significant Coastal Wetlands) | Provincial data |
| Other Wetlands | Provincial data |
| Significant Woodlands | new layer produced through this project |
| Linkages | conceptually identified through this project |
| Life Science A.N.S.I | Provincial data |
| Earth Science A.N.S.I | Provincial data |
| Permanent and Intermittent Streams | Provincial and conservation authority data |
| Fish Habitat | By “proxy” using watercourse and water body data |
| Significant wildlife habitats (deer wintering areas and alvars) (added to mapping through this project) | Provincial data |
| Conservation Oriented Lands | Includes public and NGO or “Land Trust” lands owned or managed for conservation purposes. |

| Appendix: Features Not Mapped but Part of the Natural Environment System | Notes |
|---|--|
| Significant valleylands; other valleylands | Not included due to current data limitations; many are covered as 'hazard' land areas; may be identified in future with improved data, or through site-specific studies |
| Significant portions of threatened and endangered species habitat | can 'vet' or validate significance of other layers but is incomplete, sensitive, and subject to change, and development is subject to federal/provincial permitting requirements |
| Other Significant wildlife habitats | Mapping is not generally available |
| Enhancement Areas | These are described generally and are voluntary or can be addressed when land uses change through a planning application. |
| Seepage areas and springs, headwaters, Water Table, aquifers, and unsaturated zone, significant surface | Can be identified through watershed, sub-watershed and hydrogeological investigations required for certain types of applications. |