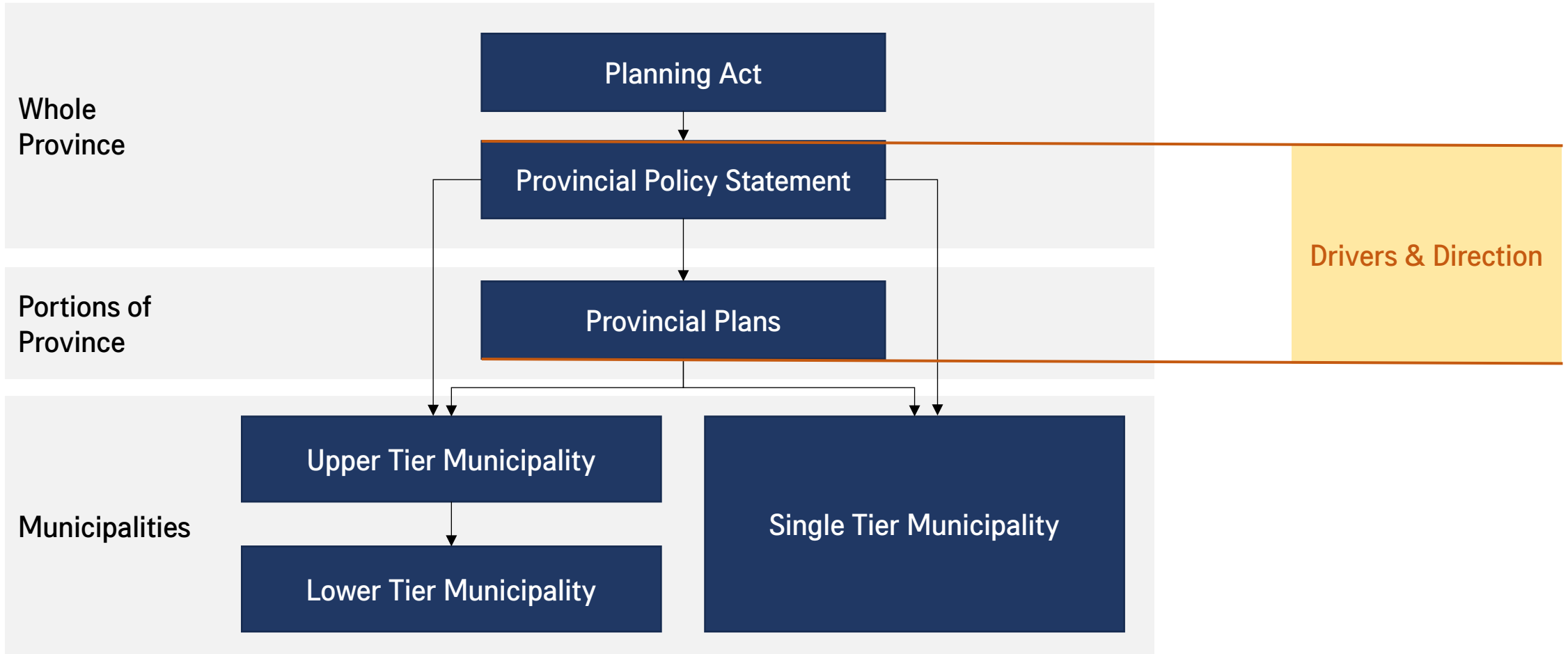


Natural Environment Systems

Holistic Planning and Management of our Natural Systems

Kristen Harrison
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Planning Context



Two Systems...

Requirement to identify a NHS and
WRS: 2014 PPS



PPS s. 2.2 Water (s. 2.2.1 c, d)
No geographic limitation.



PPS s. 2.1 Natural Heritage (s. 2.1.2, 2.1.3)
Only directed to municipalities in Ecoregions 6E and 7E
For this presentation, focused on Ecoregions 6E and 7E.

PPS Natural Heritage, policy 2.1.2

The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.



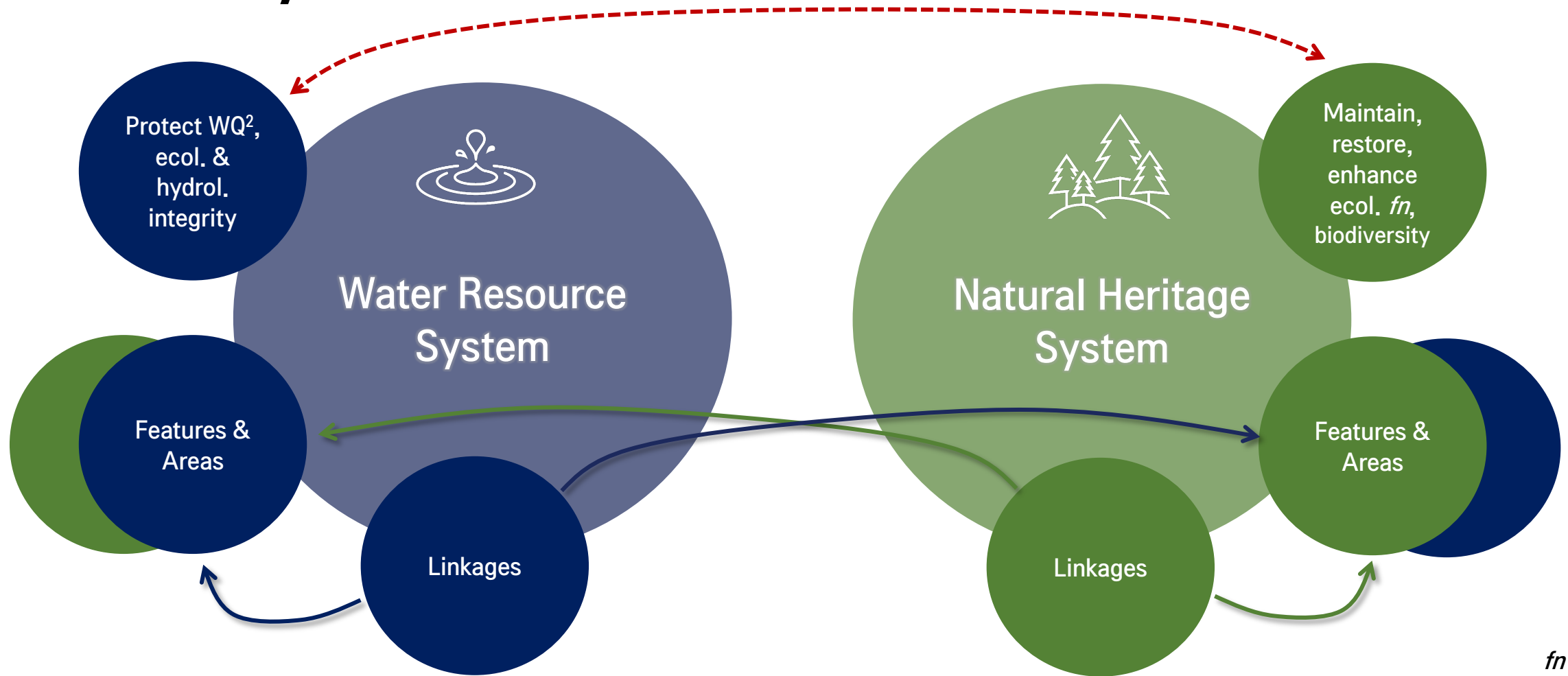
PPS Water, policies 2.2.1 d, e

Planning authorities shall protect, improve or restore the quality and quantity of water by:

- Identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of a watershed.
- Maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas.

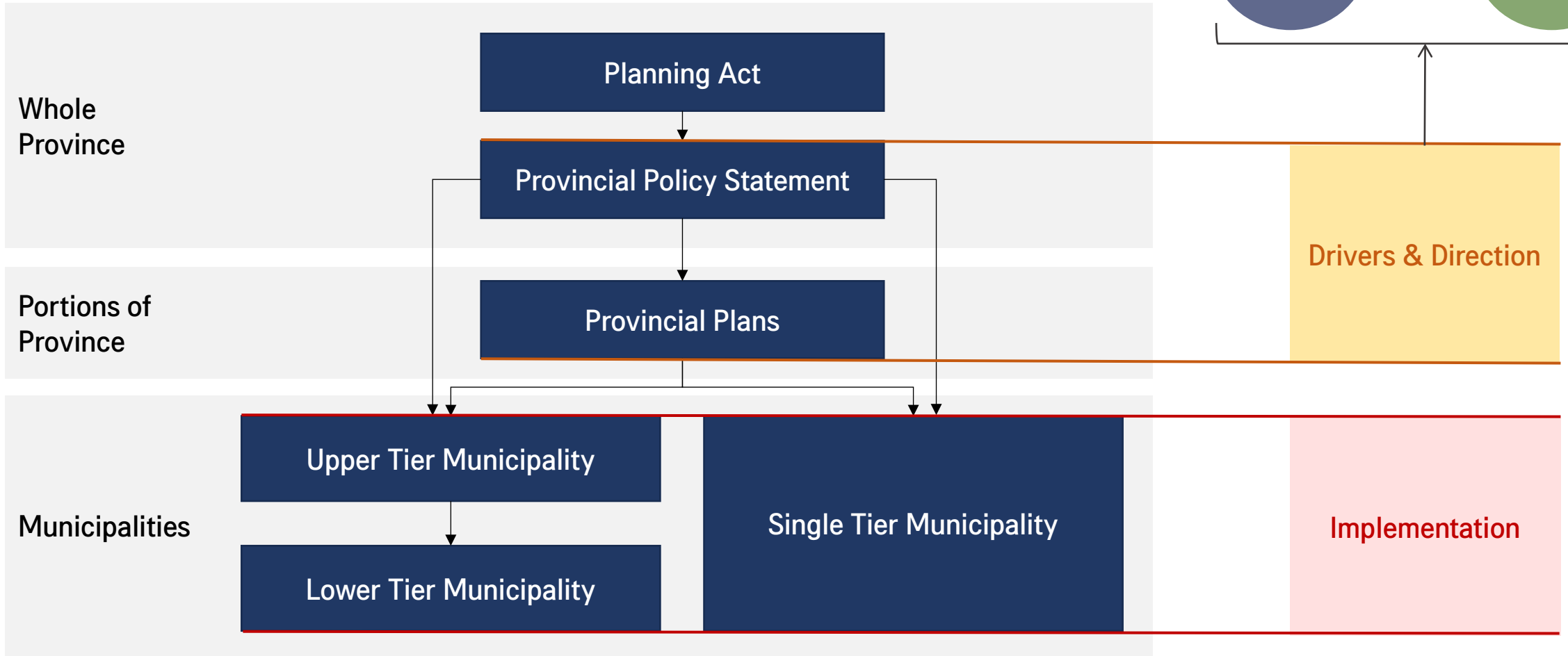
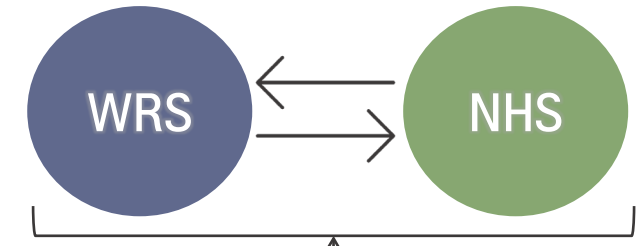


Two Systems...



fn = function
PPS s. 2.1 Natural Heritage, s. 2.2 Water

Planning Context



Two Systems - Implementation

Water Resource System

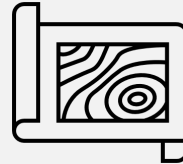
Defined features, areas & functions

Policies

Process & Decision-making

Challenges

Shared features & areas



Interdependent

Conflicting



Redundant

Complex



Consistency

Natural Heritage System

Defined set of features, areas & functions

Policies

Process & Decision-making

Is it efficient?

Is it the best approach to build climate resilience?

Does a two-system approach provide the best management?

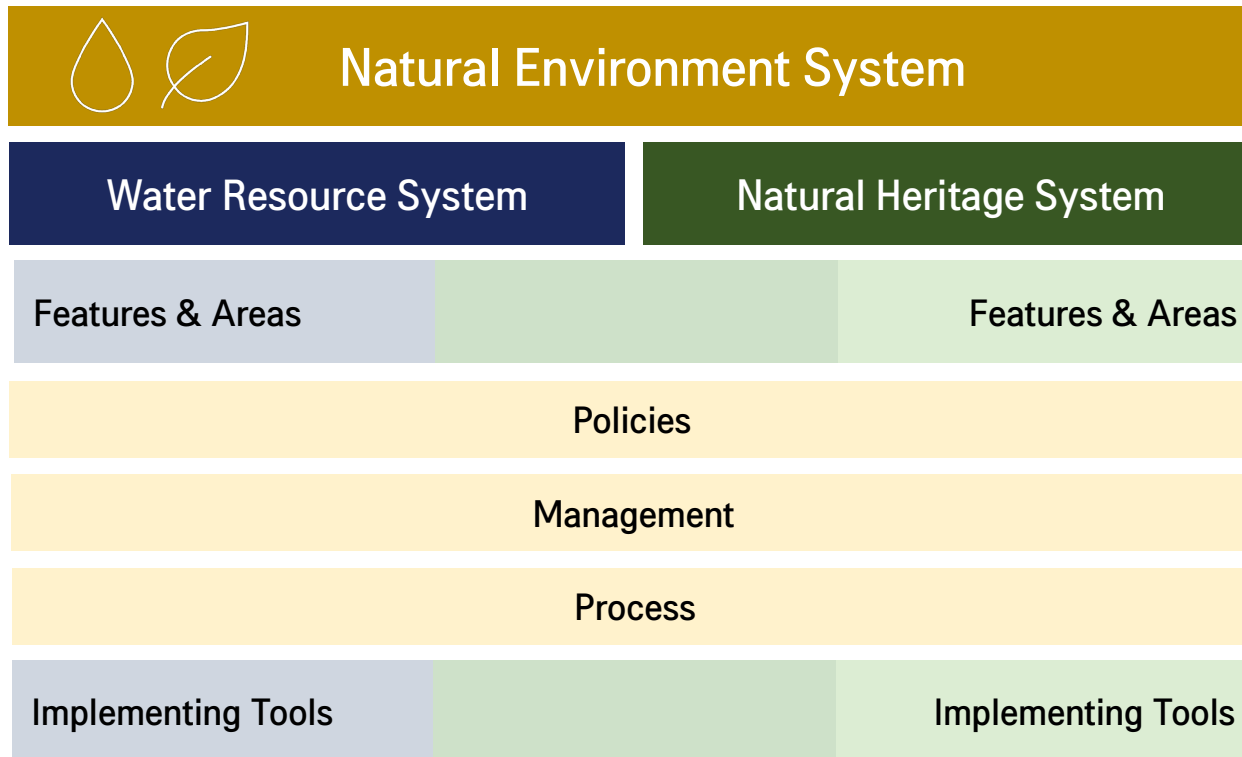
Is it effective?

Is it holistic?

Does it reflect their interdependence?



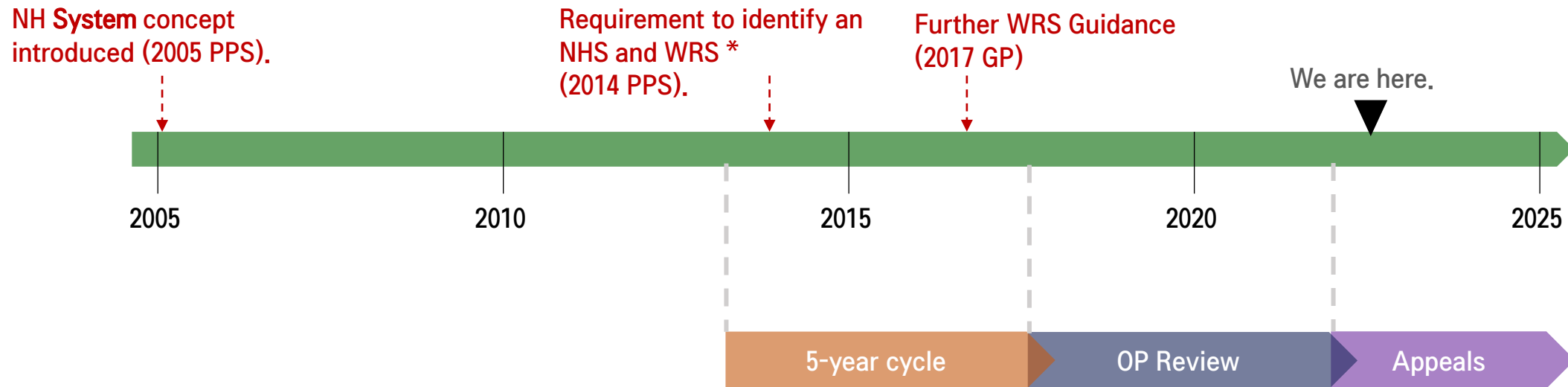
The Natural Environment System



- **Structure:**
 - Composite system to meet provincial requirements
- **Planning:**
 - Reduce complexity of policy, management & process
 - Supports implementation
- **Environmental:**
 - Holistic view
 - Connections & relationships
 - Climate resilience & biodiversity

Why are we just talking about this now?

It takes time.

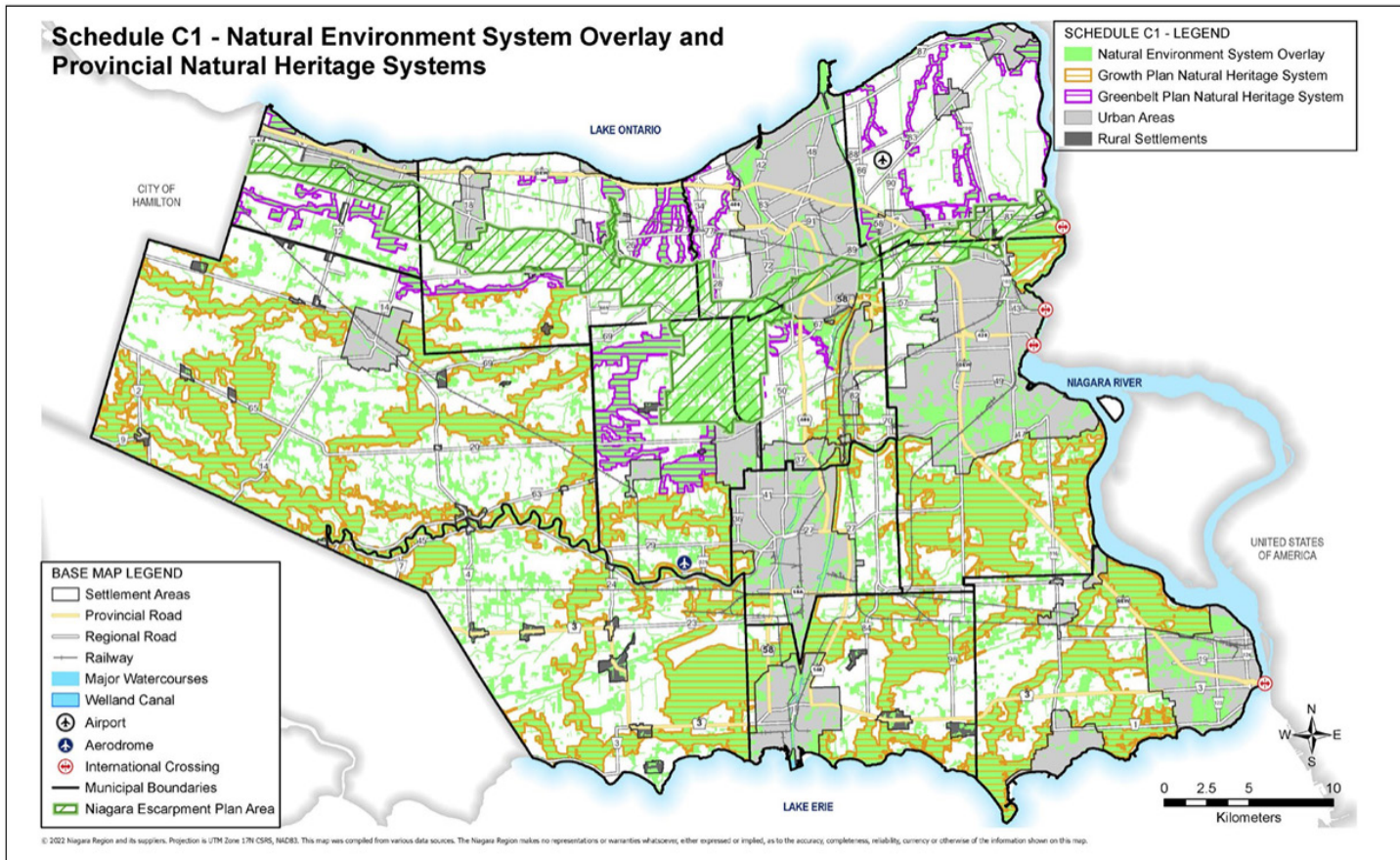


* NHS Required in Ecoregions 6E and 7E. No geographic limitation for WRS.

Examples



Niagara Region



- Complex planning area:
 - Growth Plan
 - Greenbelt Plan
 - Niagara Escarpment Plan
 - Other lands (PPS)
- Strong agricultural landscape
- Significant growth
- New Official Plan
- **Approved November 2022**

Niagara Region



3.1 The Natural Environment System

This section outlines the objectives and policies for a Regional *natural heritage system* and *water resource system*.

The *natural heritage system* is made up of features such as *wetlands*, *woodlands*, *valleylands*, and *wildlife habitat*, as well as components such as *linkages*, *buffers*,

supporting features and areas, and *enhancement areas*. The intent of the *natural heritage system* is to preserve and enhance the biodiversity, *connectivity*, and long-term *ecological function* of the natural systems in the region.

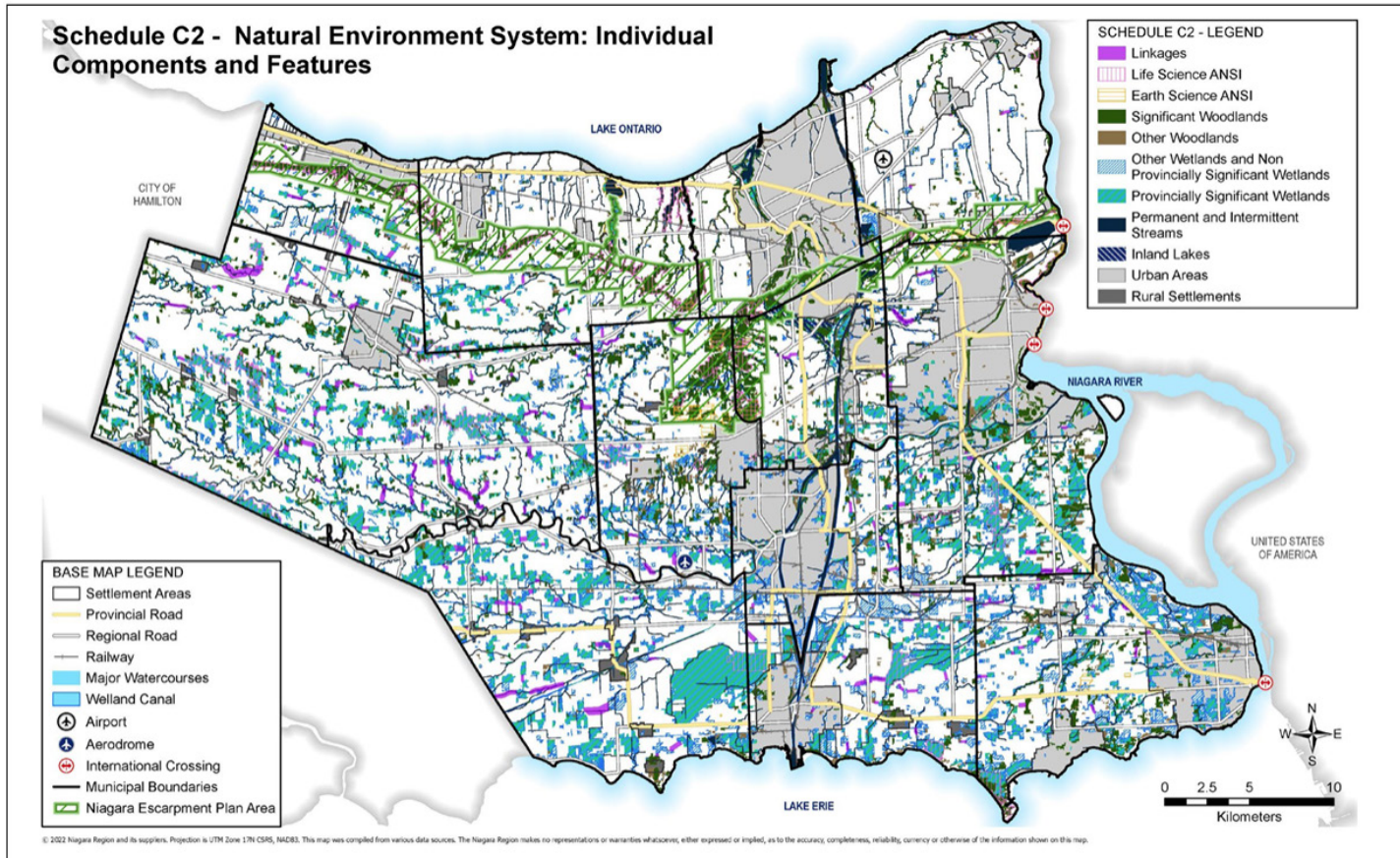
The *water resource system* is made up of both *groundwater features* and *surface water features* and areas. The intent of the *water resource system* is to protect the ecological and hydrological integrity of water resources and the various *watersheds* in the region.

The *natural heritage* and *water resource systems* are ecologically linked, rely on and support each other, and have many overlapping components. The establishment of these natural systems is required by Provincial policy. These systems have been integrated in this Plan and are known together as the Region's *natural environment system*.

Clearly speaks to Provincial systems directive.

Introduces the composite system. Establishes interdependence.

Niagara Region



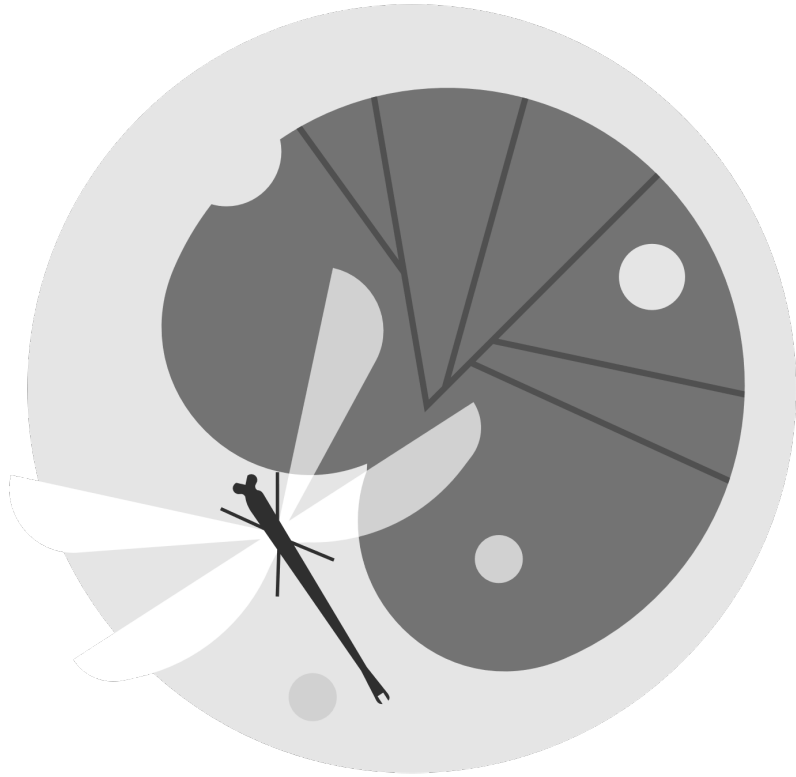
- One set of objectives for the N.E.S.
- One set of policies for the N.E.S*
 - Subsections for different components
- Explanatory figures
- Holistic planning & management
- Two tools:
 - Environmental Impact Study
 - Hydrological Evaluations

* Broken down by plan area.

Bruce County

- Two distinct geographies
 - Northern Bruce County – large, contiguous natural cover
 - Southern Bruce County – greater agricultural influence
- Natural Legacy Project
 - Natural Environment System
 - Geographically distinct NHS (northern and southern Bruce County)
 - Consistent WRS
- **New Official Plan Policy – In Progress**

There will be more...



- As more municipalities reach review periods
- With approved examples
- Lessons learned



Thank you



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