# Alberta<br/>Wetland Policy

Moving Forward

Water Policy Branch November 22, 2018



### **Outline**

- What is a Wetland
- Wetland Loss and Implications
- Policy Context and Overview
- Recognizing Municipal Needs, Challenges and Opportunities
- State of Implementation
- Path Forward



### What is a Wetland?

Bog



Marsh



Fen



**Swamp** 



**Shallow Open Water** 

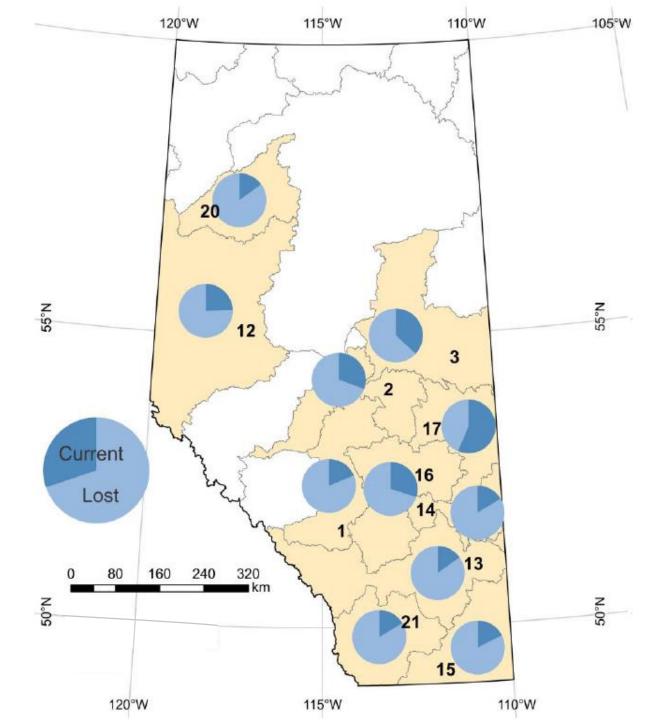




### What do Wetlands do?

- "...land saturated with water long enough to promote formation of water altered soils, growth of water tolerant vegetation, and various kinds of biological activity that are adapted to the wet environment."
- Highly diverse, productive ecosystems that provide a host of ecological services:
  - protecting water quality (filtering nutrients, heavy metals, pesticides)
  - water storage (flood/drought resistance), groundwater recharge
  - habitat for wildlife, fish and plants, and sustaining biodiversity.
- Alberta has lost between 60 and 70% of wetlands within the White (settled) Area of the province. Losses in White and Green Area are ongoing.





### Why Should We Care?

- Overwhelming drainage infrastructure
- Transport and loss of critical nutrients (phosphorus & nitrogen) and topsoil
- Cost of water treatment (nutrients, pesticides, heavy metals, etc.)
- Reduced ability to mitigate against drought conditions
- Reduced productivity of groundwater wells (particularly shallow wells)
- Flood risk to downstream landowners/producers and municipalities
- Modified microclimates/moisture regimes
  - More extreme extremes



### **Policy Context**

- Early European settlement to late 20<sup>th</sup> century:
  - Impediment to agricultural productivity
  - Government-promoted drainage
- Wetland Management in the Settled Area of Alberta: an Interim Policy (1993)
  - Marsh wetlands in the White Area (limited scope)
- Alberta Water Council (2005-2008)
  - Recommendations toward a new provincial policy
- Alberta Wetland Policy (2013)
  - Based on stakeholder engagement (AUMA, AAMDC, Agriculture)
  - Implemented 2015 (White Area) and 2016 (Green Area)



### **Legislative Context**

#### Water Act:

- Under the Water Act, the property in and right to diversion and use of all water is vested in the Province.
- Enabling legislation for the Alberta Wetland Policy, not affected or altered by the Policy.
- Public Lands Act:
  - Title to the beds and shores of:
    - a) all permanent and naturally occurring bodies of water, and;
    - b) all naturally occurring rivers, streams, watercourses and lakes, is vested in the Crown in right of Alberta.
- Municipal Government Act
- Alberta Land Stewardship Act



### **Policy Overview**

#### Policy Goal:

 To conserve, restore, protect, and manage Alberta's wetlands to sustain the benefits they provide to the environment, society, and the economy

#### **Policy Outcomes:**

- 1. Wetlands of the highest value are protected for the longterm benefit of all Albertans
- 2. Wetlands and their benefits are conserved and restored in areas where losses have been high
- 3. Wetlands are managed by avoiding and minimizing negative impacts, and, where necessary, replacing lost wetland value
- 4. Wetland management considers regional context



### Wetland Mitigation Hierarchy

### Avoid

Minimize

Replace

#### **Avoidance**

Preferred response is to avoid impacts on wetlands.

#### **Minimization**

Where avoidance is not possible, proponents expected to minimize impacts.

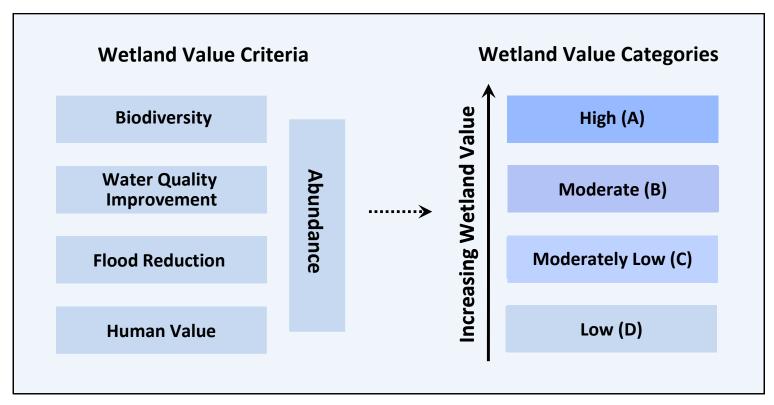
#### Replacement

Where avoidance and minimization efforts are not feasible or prove ineffective, wetland replacement will be required.



### Relative Wetland Value

Wetlands are highly diverse in form, function, use, and distribution across the province – they are not all of equal value.





### Municipal Needs and Opportunities

- Development of more efficient regulatory approaches and tools to enable standard activities:
  - Road widening, road maintenance
  - First step: Alberta Wetland Rapid Evaluation Form (vs. Tool)
- Municipal wetland outcomes are a priority for the Government of Alberta:
  - Mitigation Directive stipulates that replacement will be placebased. Wetland kept within municipal boundary.
  - Promotes active engagement of municipal partners.
- Pending approach to wetland replacement enables key partners, including municipalities.
  - Wetland Directives
  - Authenticating Professionals (Professional Practice Standards)
  - System diversification

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### Status Update

#### Key completed items:

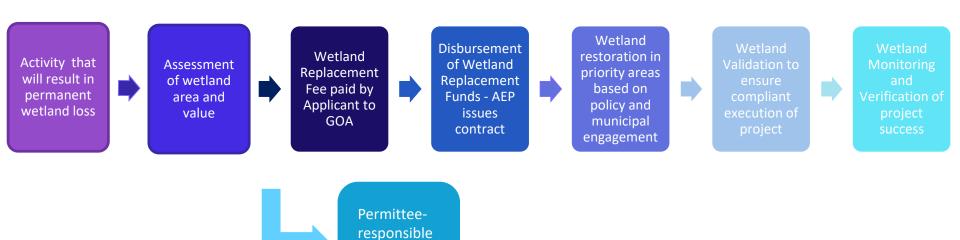
- Wetland Restoration Directive design, validation, verification (Offset System)
- Competencies to define practice standards for Wetland Science, Design, and Engineering
- Wetland Construction Directive and Guide to be deployed before end of calendar year
  - Borrow pits, stormwater management systems

#### Key next steps:

- System Diversification
  - Enabling a broader suite of delivery agents, including municipalities
    - RMA 2012 Resolution
  - Working with municipalities to explore collaboration
  - Promoting program awareness through education and outreach

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### Diversification – Approach



wetland replacement



### **Anticipated Benefits**

- Delivery Agent Diversification
  - Greater system accessibility
  - No need for memoranda of agreement with each agent
  - Meets expectations of RMA 2012 resolution
- Improved Oversight
  - Accountabilities are clear, within a defined governance structure
  - Enables explicit linkages, tracking, and reporting
    (wetland loss → fee payment → expenditure → restoration)
- Supports enhanced transparency
- Improved Delivery of Wetland Ecosystem Services to Albertans



## Questions?

