

# Alberta Wetland Policy: Finding Common Ground

PHJV Workshop, Leduc  
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# Outline

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- **Brief Background**
  - **What is a Wetland**
  - **Wetland Loss and Implications**
  - **Policy Context (Brief Background)**
- **Balancing Needs**
  - **Policy and Stakeholders**
- **Engagement Opportunities**
- **Integrated Management**
- **Ongoing Efforts**

# Alberta's Wetland Classes

**Bog**



**Fen**



**Swamp**



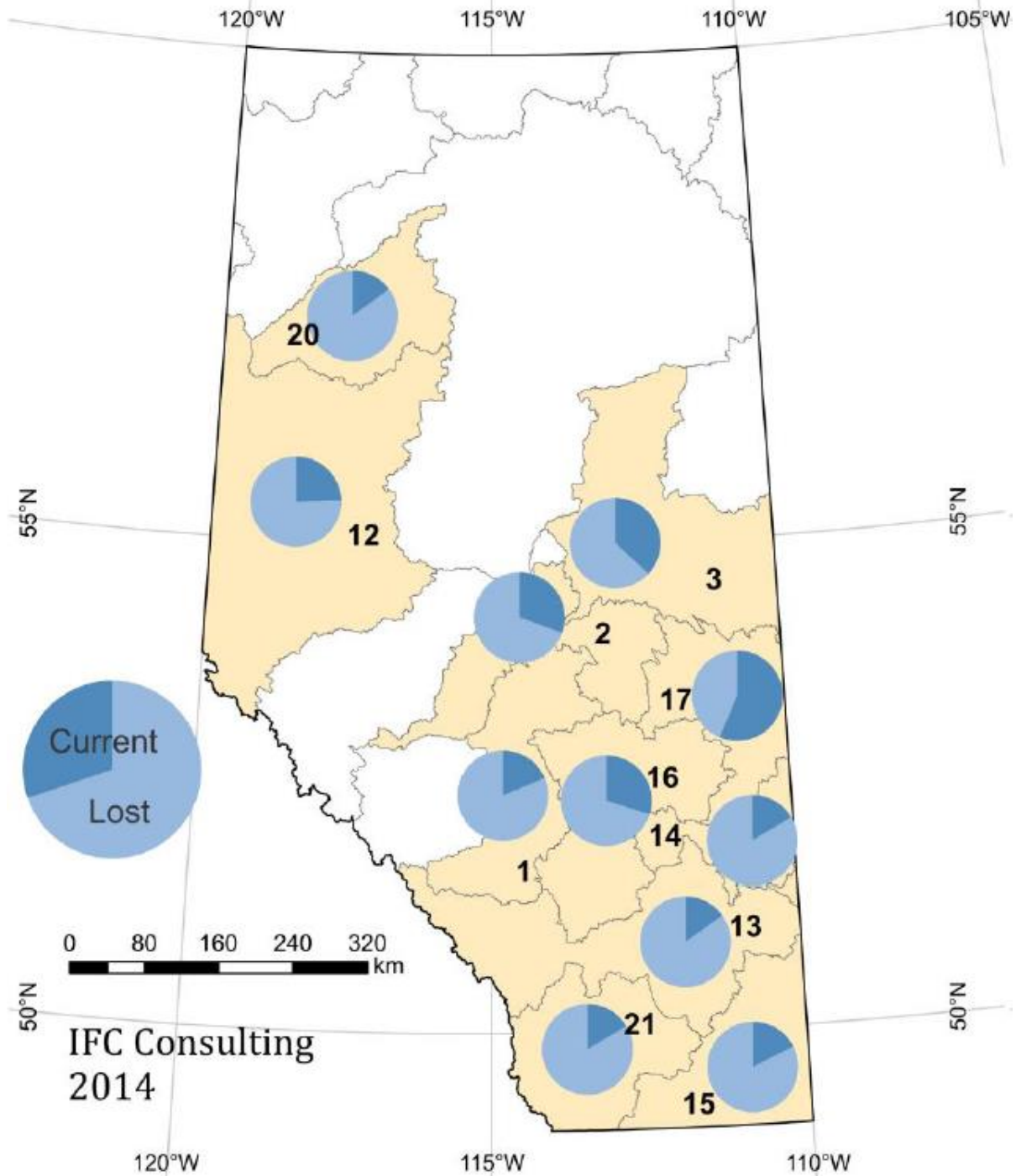
**Marsh**



**Shallow Open Water**



# Wetland Losses



# Wetland Loss – Implications

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- **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**
- **Flood risk to downstream landowners/producers and municipalities**
- **Modified microclimates/moisture regimes**

# Wetland Policy in Alberta

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- **Early European settlement to late 20<sup>th</sup> century:**
  - Impediment to growth and productivity
  - Government-promoted drainage
- **Wetland Management in the Settled Area of Alberta: an Interim Policy (1993)**
  - Marsh wetlands in the White Area (limited scope)
  - 2005 Wetland Restoration Guide
    - 3:1 compensation ratio for lost wetland area
- **Alberta Water Council (2005-2008)**
  - Recommendations toward a new provincial policy
- **Alberta Wetland Policy (2013)**
  - Based on stakeholder engagement (Agriculture, RMA, AAMDC)
  - Implemented in stages since 2015
  - Unmitigated losses continue

# Alberta Wetland Policy

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## 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 long-term 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

# Mitigation Hierarchy

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**Avoid**

**Minimize**

**Replace**

## Avoidance

The preferred response is to avoid impacts on wetlands.

## Minimization

Where avoidance is not possible, proponents will be expected to minimize impacts on wetlands.

## Replacement

As a last resort, and where avoidance and minimization efforts are not feasible or prove ineffective, wetland replacement will be required.



# Challenges

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- **Unmitigated wetland losses continue.**
  - What is a wetland?
  - Awareness of policy, legislation, and regulation may be limited (wetland policy, *Water Act*, *Public Lands Act*)
  - System may be cost-prohibitive, limiting participation.
  - Wetland objectives may not be well aligned with economic/social objectives/outcomes.
- **Information gaps:**
  - Limited ability to translate wetland ecosystem services into localized benefit and financial return.
- **System designed as one-size-fits-all.**
  - Works for sectors able to pass on costs to consumers.
- **Wetland restoration program:**
  - Limited understanding and breadth of awareness
  - Misperceptions around the process and delivery

# Balancing Needs

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- **Acknowledge and manage limitations of sectors, while respecting spirit and intent of the policy:**
  - **Agricultural Producers/Private Landowners**
  - **Municipalities, Power Transmission/Distribution**
- **Challenges and limitations of producers:**
  - **Information availability and regulatory awareness**
  - **Wetlands as obstacles to efficiency and productivity**
  - **Cost of regulatory process and wetland replacement**
  - **Variability of climate and weather**
  - **Inability to pass on costs**
  - **Lack of an economic analysis (cost-benefit)**
- **Municipal considerations:**
  - **Ratepayer pressures, positions, and perspectives**
  - **Infrastructure challenges (e.g., drainage)**
  - **Development costs and timelines (e.g., roads)**

# Opportunities

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- **Development of more efficient approaches to standard activities:**
  - **Accepted Practice (for the regulator)**
  - **Codes of Practice (for the regulated; e.g., road widening/maintenance, distribution pole placement)**
- **Place-based wetland outcomes are a priority for the Government of Alberta:**
  - **Mitigation Directive stipulates that replacement will be place-based. Wetland kept within municipal boundary.**
  - **Necessitates active engagement of municipal partners.**
- **New approach to wetland replacement (“compensation”) enables more partners in delivery.**
  - **Wetland Directives**
  - **Centralized Account**
  - **Authenticating Professionals**

# Partnerships

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- **Working with the agricultural sector and individual producers:**
  - **GOA Agriculture and Environment Working Group**
  - **NAWMP Agriculture and Wetlands Working Group**
  - **AEPA: Water Working Group**
  - **Pursuit of solutions :**
    - System accessibility (understanding/awareness, cost)
    - Delivery options
    - Education/outreach programs
- **AEP has initiated discussions with various partners to explore avenues of communication and collaboration:**
  - **E.g., Municipalities, WPACs, North American Waterfowl Management Plan, AUMA, RMA**
  - **Inventories of wetland restoration opportunities and needs**

# Integrated Management

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- **Land use planners and land managers critical to broader wetland policy success:**
  - **Municipalities**
  - **Watershed Planning and Advisory Councils**
  - **Watershed Stewardship Groups**
  - **Regional and sub-regional planners (AEP)**
  - **Indigenous Peoples**
- **Local and regional land planners and managers best situated to apply existing knowledge and tools in enabling achievement of desired wetland outcomes:**
  - **Municipal Government Act and Bylaws**
  - **Municipal Development Plans**
  - **Alberta Land Stewardship Act**
- ***Communication* across regulators, regulatory processes, and regulated parties/sectors**

# Policy Implementation: Critical Work

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- **Completed tools:**
  - **Wetland Restoration Directive – design, validation, verification (Offset System)**
  - **Competencies to define a practice standard for Wetland Science, Design, and Engineering**
- **Key pieces under development:**
  - **Wetland Construction Directive & Guide (coming soon)**
  - **Wetland Replacement Account**
    - Enables delivery of wetland replacement work through contract or grant process
    - Supports diversity of wetland restoration delivery agents
    - Enables focus on place-based objectives
  - **Wetland Education Network and Program**
  - **Agriculture partnerships and processes**

# Resources

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- **Alberta Wetland Policy Implementation**
  - <http://aep.alberta.ca/water/programs-and-services/wetlands/alberta-wetland-policy-implementation.aspx>
- **www.abnawmp.ca**
  - **Improving Wetland Stewardship in Alberta's Agricultural Landscapes**
  - **A Guide to Municipal Wetland Conservation in Alberta**
- **Wetland inventory (GeoDiscover Alberta)**
- **Wetland assessment tools designed to support risk management and land use planning:**
  - **Functional prioritization (e.g., flood mitigation, groundwater recharge)**
  - **Inform conservation/protection priorities**
  - **Support identification of wetland restoration opportunities/needs**

Alberta

Thank You!

