Wetlands, Water, & Integrated Resource Management: Wetland Management in Alberta

Water Policy Branch
Environment and Parks
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Outline

• Brief History of Management
• Current Context
  – Legislation and Regulation
  – Jurisdiction
• Integrated Resource Management
• Policy Context (Brief Background)
• Status of Implementation
  – White (Settled) Area
  – Green Area (Crown Lands)
  – Next Steps
Wetland Management in Alberta

- Early European settlement – late 20th century:
  - Wetlands as wasteland
  - Impediment to agricultural productivity
  - Government-promoted (sponsored) drainage

  - Marsh wetlands in the White Area (limited scope)
  - 2005 Wetland Restoration Guide
    - 3:1 compensation ratio for lost wetland area
    - Ongoing losses (non-compliance) and unmitigated loss of bog/fen/swamp and Green Area wetlands

- Alberta Water Council (2005-2008)
  - Recommendations toward a new provincial policy

- Alberta Wetland Policy (2013)
  - Based on AWC recommendations
Wetland Losses in Alberta

IFC Consulting
2014
**Legislative Context**

- **Water Act:**
  - Under the provincial *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**
Current Context

- **Land-use Framework (2008)**
  - Seven regional land-use plans
  - Strategy for conservation and stewardship
  - Efficient use of land
  - Information, monitoring, and knowledge systems
  - Inclusion of indigenous peoples
  - Management frameworks (biodiversity, watershed, wetland)

- **Local Government**
  - Municipal Plans (statutory)
  - Environmental Reserve
  - Bylaws

- **Stewardship**
  - Watershed Planning Advisory Councils
  - Watershed Stewardship Groups
IRMS and Wetland Policy

Provincial Scale Wetland Policy: Shift to relative wetland value; Use of offsets

Provincial base with flexibility for regional planning and outcomes, and integrated policy (air, land, water biodiversity)

Consistent Rules: AER/AEP, regional planning foundation

Monitoring and Reporting: Monitoring Agency, Transparency, Public Awareness

Reporting against provincial goals as well as regional performance, Reporting of Responsible Development
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 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.
Relative Wetland Value

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

Wetland Value Criteria
- Biodiversity
- Water Quality Improvement
- Flood Reduction
- Human Value

Wetland Value Categories
- High (A)
- Moderate (B)
- Moderately Low (C)
- Low (D)
Wetland Mitigation Hierarchy

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.
Phase 1: White Area Implementation

• White (settled) Area Implementation on June 1, 2015.
• Wide range of science-based operational tools completed and active:
  – Wetland inventory and map of estimated relative wetland value
  – Actual relative wetland value tool (site-level assessment)
  – Key guidance (clarity, consistency, predictability in process):
    • Alberta Wetland Classification System
    • Wetland Mitigation Directive
    • Wetland Identification and Delineation Directive
    • Wetland Assessment and Impact Report Directive
    • Wetland Administrative Procedures
    • Wetland Application Checklist
Phase 1: Learnings

- Fairly steep learning curve, both for applicants and regulators.
- Considerable confusion around the nature of policy and accountabilities, particularly in municipal sector.
- Some tweaking of tools and systems required – continuous improvement/adaptive management.
- Anticipated replacement ratio of ~2.8:1 exceeded, with desired 3:1 achieved.
- Despite targeted efforts, affected stakeholders have not always been reached.
- Need for ongoing conversation and collaboration between Policy & Planning, Implementation Team members, and Operations (+ affected stakeholders).
Phase 2: Green Area Implementation

- Planned for July 4, 2016
- Key items completed or nearing completion:
  - Updated assessment tool for actual relative wetland value (site-level assessment) of boreal and foothills wetlands
  - Revision of existing White Area tools and systems (directives and guidance documents) to reflect Green Area challenges:
    - Wetland management on Crown Land
    - Peatland management, given operational challenges and extensive coverage
    - Increased role of broader legislative context (EPEA, Public Lands Act, Water Act, ALSA) in wetland management, particularly for large-scale, multi-year projects
Implementation Considerations

- Green Area implementation primarily managed through existing regulatory processes:
  - *Public Lands Act* and EPEA
  - Minimization of new *Water Act* applications
  - Sensitive to resource limitations

- Broad range of wetland impacts subject to reclamation:
  - Not permanent loss, provided documented commitment to wetland reclamation
  - Opportunity to explore role of BMP, SOP, COP in minimizing impact and maximizing return on reclamation

- Need to acknowledge and manage limitations of affected stakeholders, while respecting policy spirit and intent:
  - Municipalities (e.g., road construction)
  - Private Landowners
Next Steps

• **Items nearing completion:**
  – Wetland Restoration Protocols (Conservation Offsets)
  – Competencies and practice standards for practicing professionals:
    • Collaboration with Professional Regulatory Organisations in the province (the “PRO 10”)
    • Enables professional sign-off on regulatory applications and wetland replacement projects

• **Key items under development:**
  – Provincial wetland replacement account/program
    • Centralised repository for collection and reallocation of wetland replacement monies
    • Enables delivery of wetland replacement work through contract or grant process (no designated ‘agents’)
  – Wetland Regulation
  – Wetland research/education agendas for the Province
Learnings

• **Ongoing cultural hurdles:**
  – Public perceptions of wetlands as wasteland and hindrance to development and progress persist
  – Continued promotion of ‘straight lines’ (tilling/seeding), ditching, and tile drainage in the agricultural sector
  – Incomplete understanding of regulatory accountabilities under the provincial *Water Act*

• **Ongoing importance of partnerships and collaboration toward achievement of policy outcomes:**
  – Prioritization and achievement of wetland conservation/protection and restoration objectives best realized through communication and collaboration with partners...
Partnerships

• Land use planners and land managers critical to broader policy success:
  – Municipalities, First Nations
  – Watershed Planning and Advisory Councils
  – Watershed Stewardship Groups
  – Regional and sub-regional planners (AEP)

• Wetland assessment tools designed to support risk management and land use planning:
  – Functional prioritization:
    • Flood/drought mitigation
    • Groundwater recharge/discharge
    • Biodiversity/species at risk
    • Water quality issues
  – Informs conservation/protection priorities, and supports identification of wetland restoration opportunities/needs
Thank You!