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Managing Alberta's Water Resources:

Wetland and Water Allocation Systems

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Presentation Objectives

- To provide an overview of existing policies, status of new processes/policies, and engagement opportunities
- The focus will be on 2 current initiatives:
 - Water Allocation Management System Review (WAMS)
 - Proposed intent for an Alberta Wetlands Policy

Context

- 2004 – spring 2008....a time of unprecedented growth ... everywhere ... all at once;
 - Most analysts suggest it was a glimpse into the future ... the new normal;
 - Showed the limitations and inadequacies of our policy frameworks;
 - Consequently we have a need for new approaches almost everywhere: Energy Strategy, Oil sands Strategic Plan, Land Use Framework – LARP and SSRP
- Climate Change.

Context (continued)

- Emerging issues related to water allocation including:
 - Markets already emerging.
 - NW Alberta – the next Ft McMurray?
 - Increasing consumptive use in over allocated basins.
- Land-use Framework and Cumulative Effects Management
 - New dimension to place based planning (no plans yet)
 - Trumps all other plans and planning activities
 - Uncertain Future for Basin Management Plans?
 - Cumulative Effects Management: AENV's key strategy and at the heart of the Land-use Framework.

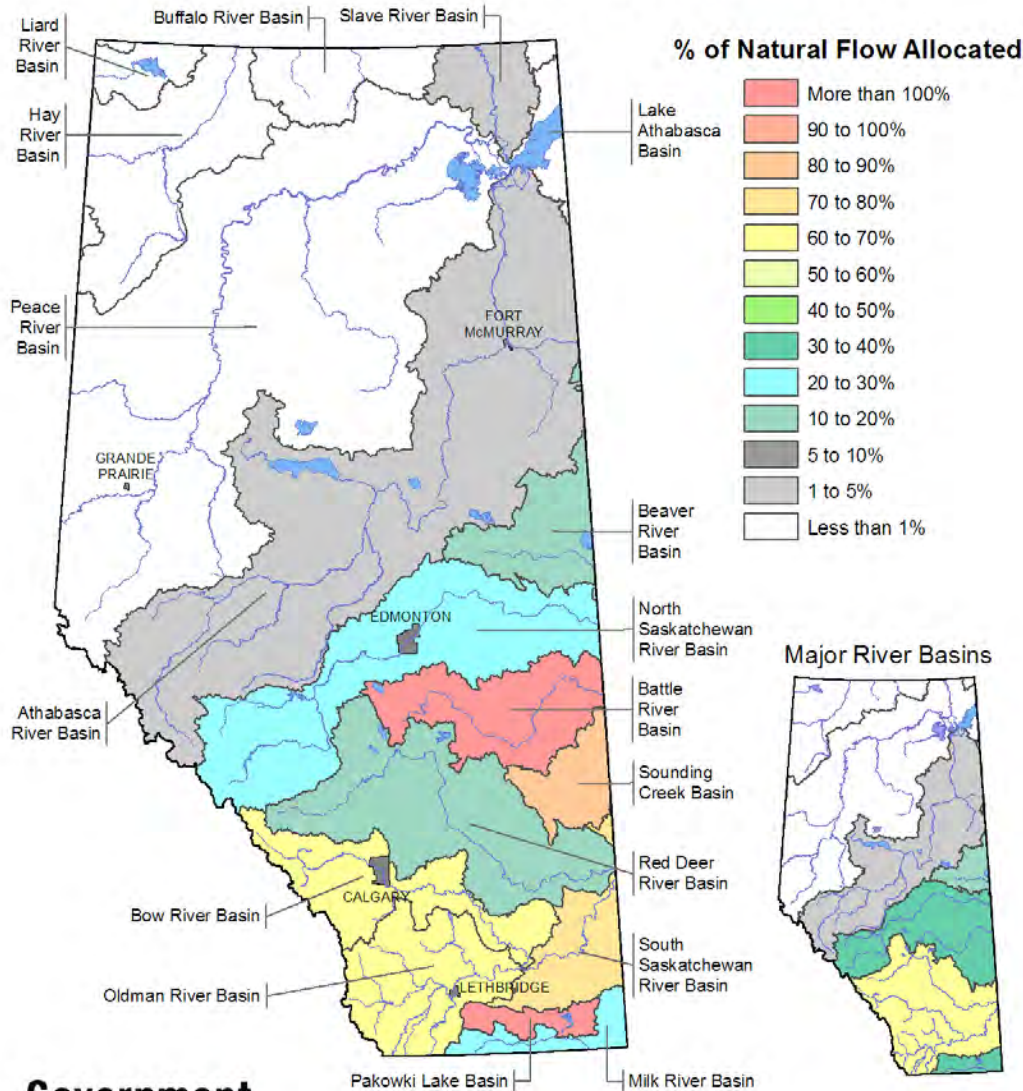
Water Allocation in Alberta

Historical overview of water allocation

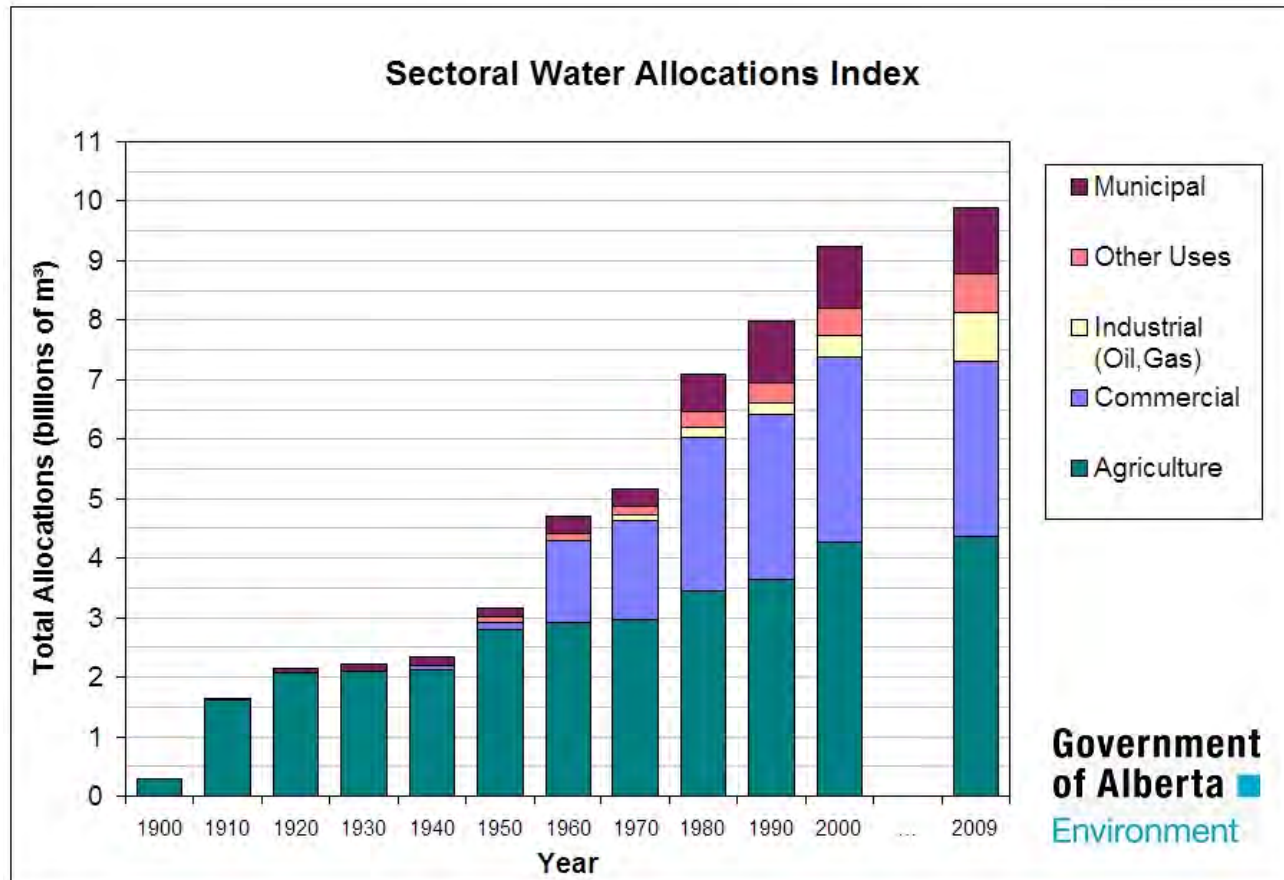
- Pre-1894:** Riparian rights
- 1894:** The first water management law (*North West Irrigation Act*) is passed
- 1931:** Control of natural resources transferred to the province.
Water Resources Act is passed
- 1999:** *Water Act*

Allocations in 2008 by River Basin Compared to Average Natural Flow

Where is the water?



Who uses the water?



What is the Water Allocation Management System project?

- Comprehensive review of Alberta's current water allocation management system
- Will result in recommendations for enhancement or renewal of the system
- Focused on “how” water is allocated, rather than “to whom” or “for what purpose.”

External reviews

- Minister's Advisory Group
 - Water Management and Allocation in Alberta
- The Alberta Water Council (WATSUP)
 - Recommendations for Improving Alberta's Water Allocation Transfer System: Water Allocation Transfer System Upgrade Project
- Alberta Water Research Institute
 - Water License Transfers: Policy and Practice in the United States and Australia

What we are hearing

- Define and protect water for the environment
- Define water allocation entitlements and obligations for all water uses
- Enable licence holders to manage the risk of water shortage
- Employ regional decision-making and water transfers
- Enhance knowledge to support water allocation management decisions

Engaging others

- Initial engagement process (Spring 2010 – Spring 2011)
 - GoA staff
 - **MLA's**
 - Preliminary First Nations conversations
- Planning for broader consultation in 2010/11

Wetland Management in Alberta

A New Wetland Policy for Alberta

- Wetland management is currently governed by *Wetland Management in the Settled Area of Alberta: An Interim Policy*.
- The interim policy does not apply to the Green Area of Alberta.
- Ongoing losses in the Green Area necessitate a policy that is provincial in scope.

The Policy Development Process

- In 2005, the Alberta Water Council was asked to provide recommendations for a provincial wetland policy.
 - These recommendations were received by the Government of Alberta in 2008.
- A cross-ministry team was assembled to analyze the recommendations made by the Alberta Water Council.
- The draft Alberta Wetland Policy incorporates the majority of recommendations made by the Alberta Water Council.

Challenges

- Must address the diverse history, geography, industry, and wetland distribution across the province.
- Must consider not only the individual wetland, but also regional significance and the relationship to other ecosystem components
- To ensure effective wetland management in Alberta, wetland function must be considered.

The Proposed Alberta Wetland Policy

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

To achieve its goal, the policy focuses on four 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, minimizing and, if necessary, compensating for impacts.
4. Wetland management considers regional context.

Approaches to Implementation

- Relative wetland value
- Mitigation hierarchy
- Stewardship

Wetland Area Approach

- AWC Recommended policy goal:
 - To maintain wetland area in Alberta
- A goal of no net loss may lack the flexibility to address the complex needs of a wetland management system for Alberta.
- This approach may manage wetlands in isolation of other considerations.
- Area as a proxy for function may not adequately support effective wetland management in Alberta.

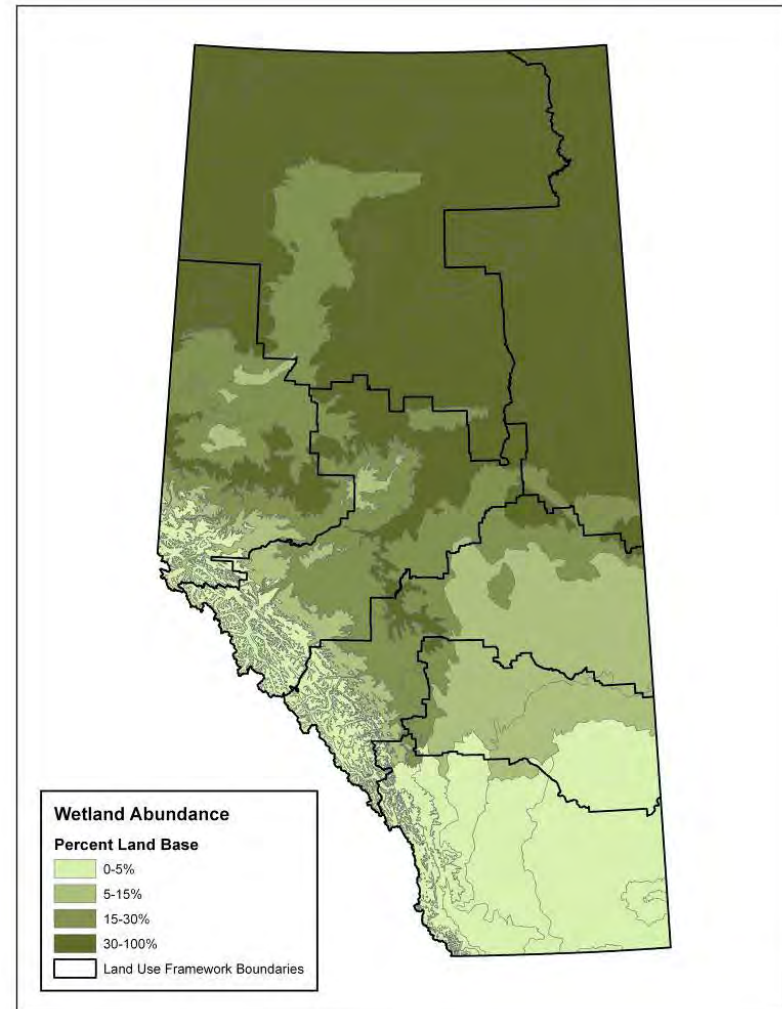
Wetland Functions

- Biodiversity
 - Number and diversity of species
 - Rare and endangered species
 - Critical habitat
- Water Quality Improvement
- Flood Reduction
- Human Use
 - Educational, cultural significance
 - Economic benefit - i.e. carbon sink, bio-mass potential



Wetland Abundance

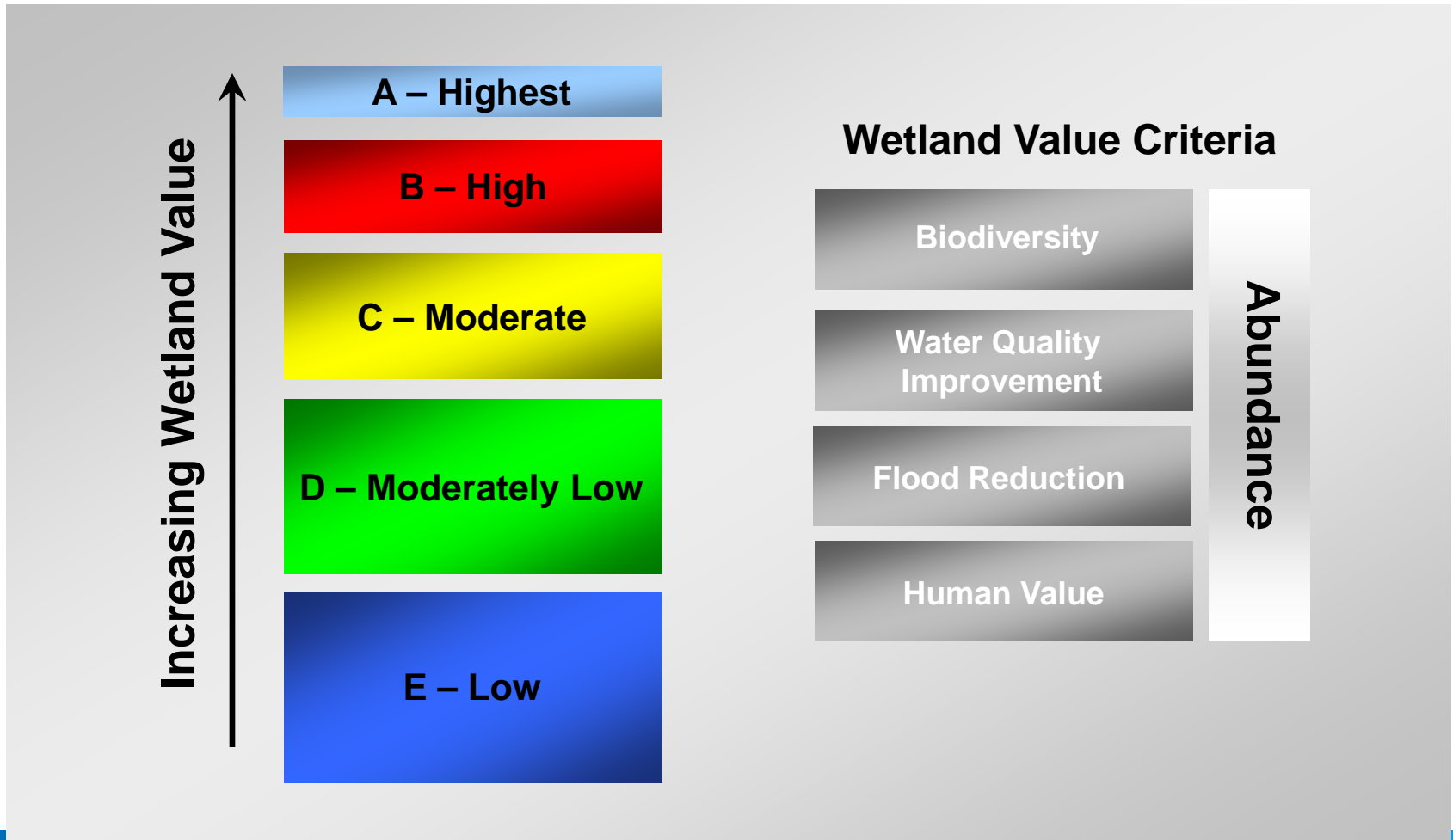
The relative abundance of wetlands in a region strongly affects the sensitivity of that region to further wetland loss.



Relative Wetland Value

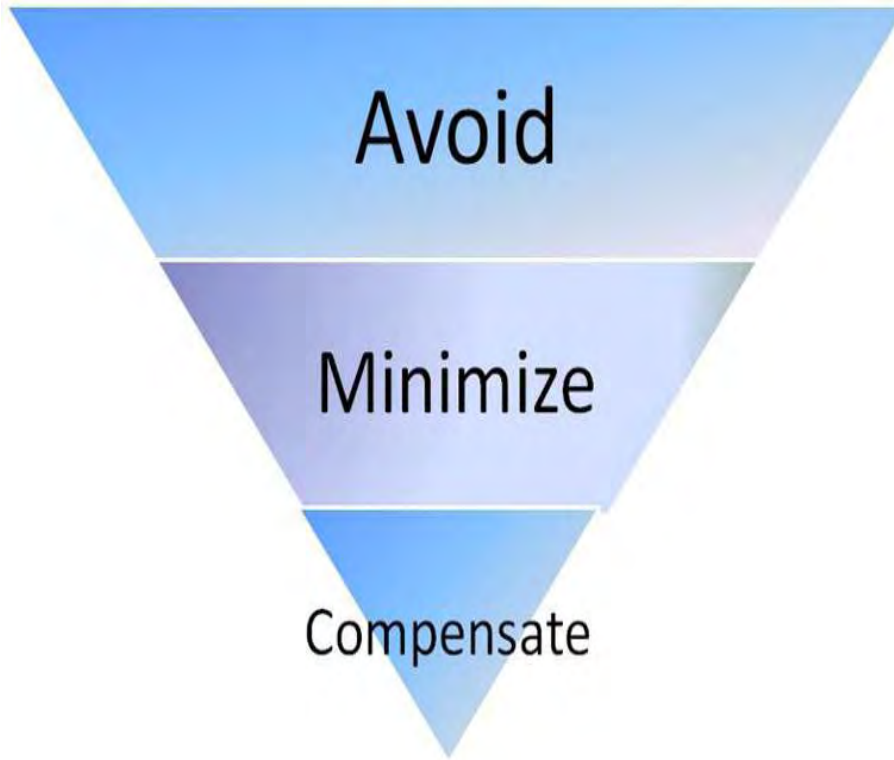
- Alberta's wetlands are highly diverse in form, function, use, and distribution across the province.
- They are not all of equal value.
- Under the proposed Alberta Wetland Policy, relative wetland value – comprising area and function – will be used to inform wetland management.

Individual wetlands will be assessed against the following criteria and assigned an overall value of A (highest), B (high), C (moderate), D (moderately low), or E (low).



Wetland Mitigation

The primary legislative basis for implementing this Policy is the *Water Act*.



Avoidance – Preferred response is avoiding impacts to wetlands.

Minimization – Where *avoidance is not possible*, proponents are expected to minimize impacts to wetlands.

Compensation – As a last resort, and *where avoidance and minimization efforts are not feasible or prove ineffective*, compensation is required.

Wetland Mitigation

- Emphasis will be placed on avoidance and minimization.
- Compensation will be required when there is permanent loss of a wetland.
 - Compensation will reflect the differences in relative wetland value and may include the following:

Replacement Measures

Wetland restoration, creation, or enhancement.

Non-Replacement Measures

Research, securement of wetlands, or education programs.

Stewardship

- All Albertans will be encouraged to conserve and protect wetlands through active stewardship.
- A wide range of initiatives will encourage wetland conservation, restoration, and protection activities:
 - Education and awareness programming
 - Voluntary programs
 - Incentives

Enhanced Wetland Management

- Tools and knowledge systems will be developed to support decision making and policy implementation, including:
 - Wetland assessment & mitigation guidelines
 - Wetland inventories & maps
 - Education & stewardship programs
 - Research to advance the state of wetland science

Next Steps

- Broader engagement of affected stakeholders
- Finalization of the Policy Document
- Policy approval
- Implementation design

Questions



Wetland Types

Bog



Fen



Swamp



Marsh



Shallow Open Water

