



Managing Water in Alberta

Battle River Basin

March 19, 2005



Water Act

Licencing based on “FITFIR” principle:

First in time, first in right

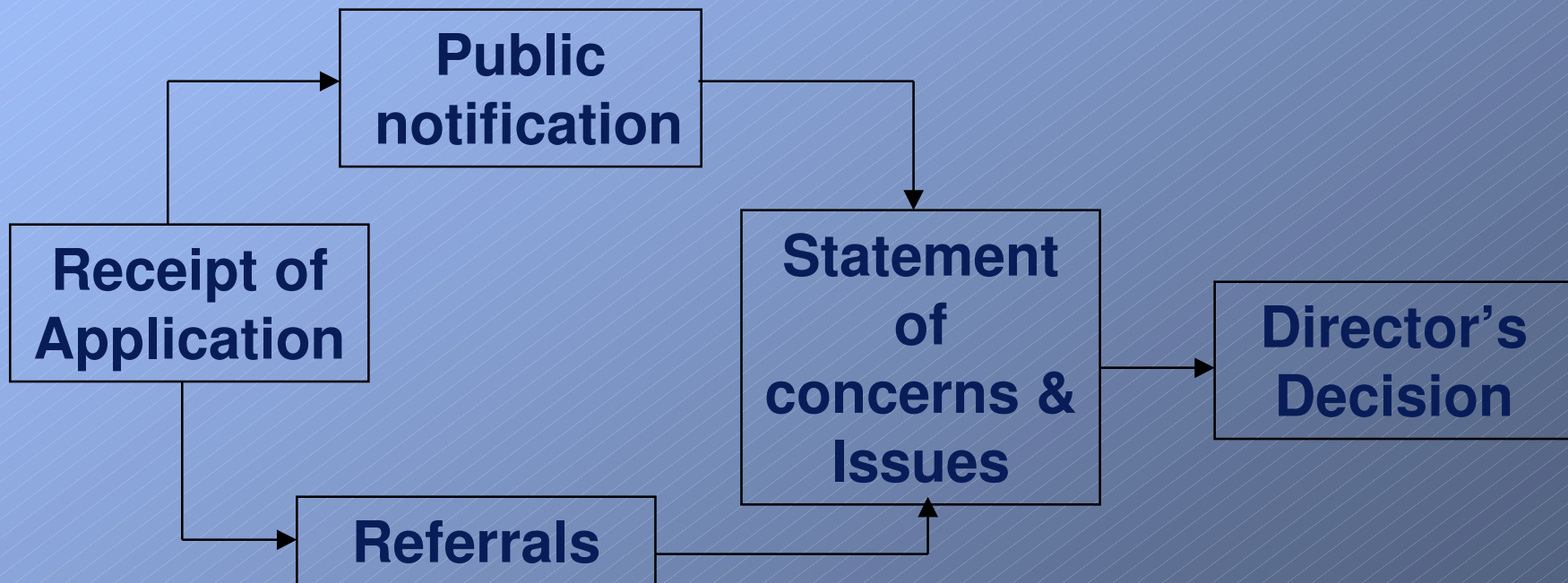
Water Act

Licensing of water allocations for the purposes of:

- ◆ **Municipal**
 - ◆ **Agricultural**
 - ◆ **Irrigation**
 - ◆ **commercial**
 - ◆ **Industrial.....etc**
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Licence Application Process





Water Act

To support and promote the conservation and management of water, including the wise allocation and use of water

Water Management

Historically,

- focus on surface water**
 - little understanding or importance placed on aquatic ecosystems**
 - minimal instream flow requirement placed as conditions in licences**
 - emphasis on storage and diversions to control water supply**
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Water Management

Historically,

- **“Instream Objective” (IO) was a single flow value, with little scientific support or public input.**
 - **Water was withdrawn during high flows and stored.**
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Water Management

Today, the Battle River IO:

- April 1- Nov 30: 1.42 m³/s (50 cfs)*
- Dec 1 - March 30: 0.71 m³/s (25 cfs)*

- Battle River tributaries:

- Withdrawals only between April 1 and June 30

****compare to natural averages: 12.8 m³/s , 1.60 m³/s***



Water Management

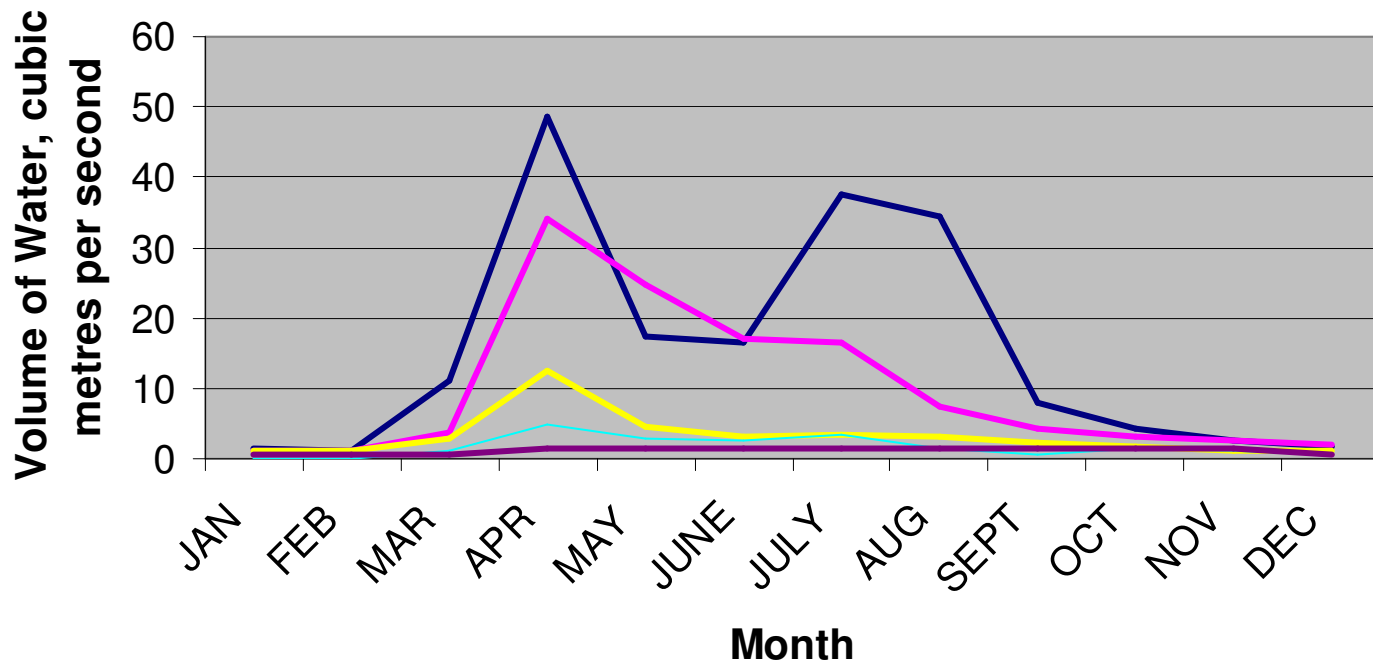
“Apportionment Agreement”

Canada/Alberta/Saskatchewan/Manitoba

- Each year, 50% of annual water volume generated in Alberta is to be passed to Saskatchewan.**
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Battle River near the Saskatchewan border Monthly Runoff Volumes

- 1990 - flood year
- 2001 - dry year
- Instream Objective
- 1996 - average year
- 1930 - driest on record



Water Management

Presently,

- **evidence of deteriorating aquatic environment and water quality**
 - **realizing that mimicking natural flows provides a healthier environment and higher quality natural water product**
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Water Management

Presently,

- **Increasing awareness of wetlands and groundwater values**
 - **Learning the importance of the interdependence of aquatic environment, riparian zones, watershed components**
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Water Management

Presently,

- **Increasing need for more information**
- **need for greater public input**

Can you identify some water-related interdependencies in your watershed?



Water Management

**Presently,
“Framework for Water Management
Planning”**

***[www3.gov.ab.ca/env/water/legislation/
framework.pdf](http://www3.gov.ab.ca/env/water/legislation/framework.pdf)***



Water Management

In the future?

That's why you are here – to advise those responsible for making decisions on water management in Alberta, and especially in the Battle River basin.



Web Site

www3.gov.ab.ca/env

- ◆ **Information and Fact Sheets on *Water Act***
 - ◆ **Framework for Water Management Planning**
 - ◆ **“Near real-time” streamflows**
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