

Environmental Management in Alberta: *Engaging Albertans on Water Priorities*

Alberta Environment and Sustainable Resource Development

November 2012

Outline

- Framing
- The Conversation
 - *What*
 - *Why*
 - *How*
- Moving Forward

Provincial Context

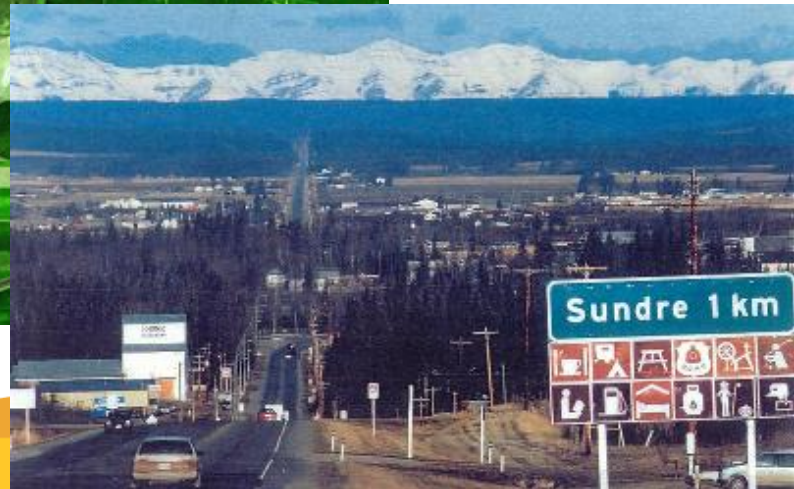
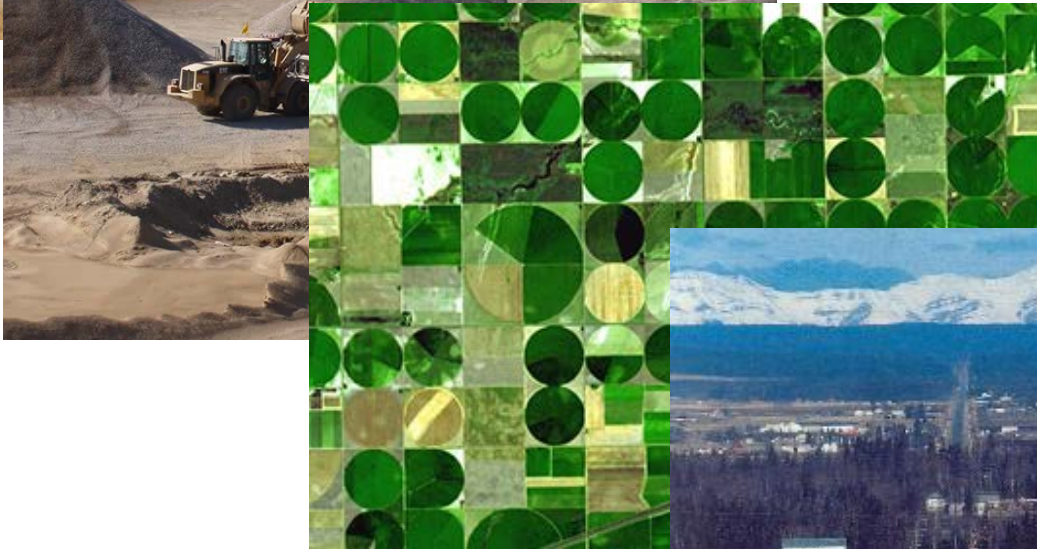
- Alberta is blessed with a range of natural resources
- Economic diversification is important for long-term sustainability...
- ...but natural resources will continue to play a foundation role in current and future quality of life for the foreseeable future
- Experiences with resource management provides an expertise and skill set for emerging global challenges
- Shift in Alberta from abundance and room to grow, to a need for enhanced management

Current 'Policy Areas' of Focus

- Oil sands
 - Tailings, monitoring, management frameworks (quantity and quality)
- Wetlands
 - Enhancement of the current wetlands policy to apply to and reflect broader provincial outcomes, with planning and management done 'in place' to reflect regional realities.
 - Includes a shift from 'acres' to 'function'
- Water management
 - Promotion of conservation, efficiency, productivity including opportunities for re-use
 - Challenge of how to develop a regional approach to optimizing the water resources available for priority areas today and into the future
- Drinking Water and Wastewater
 - Exploring opportunities to ensure the sustainability of current systems
- Hydraulic Fracturing
 - Enhanced regulatory framework

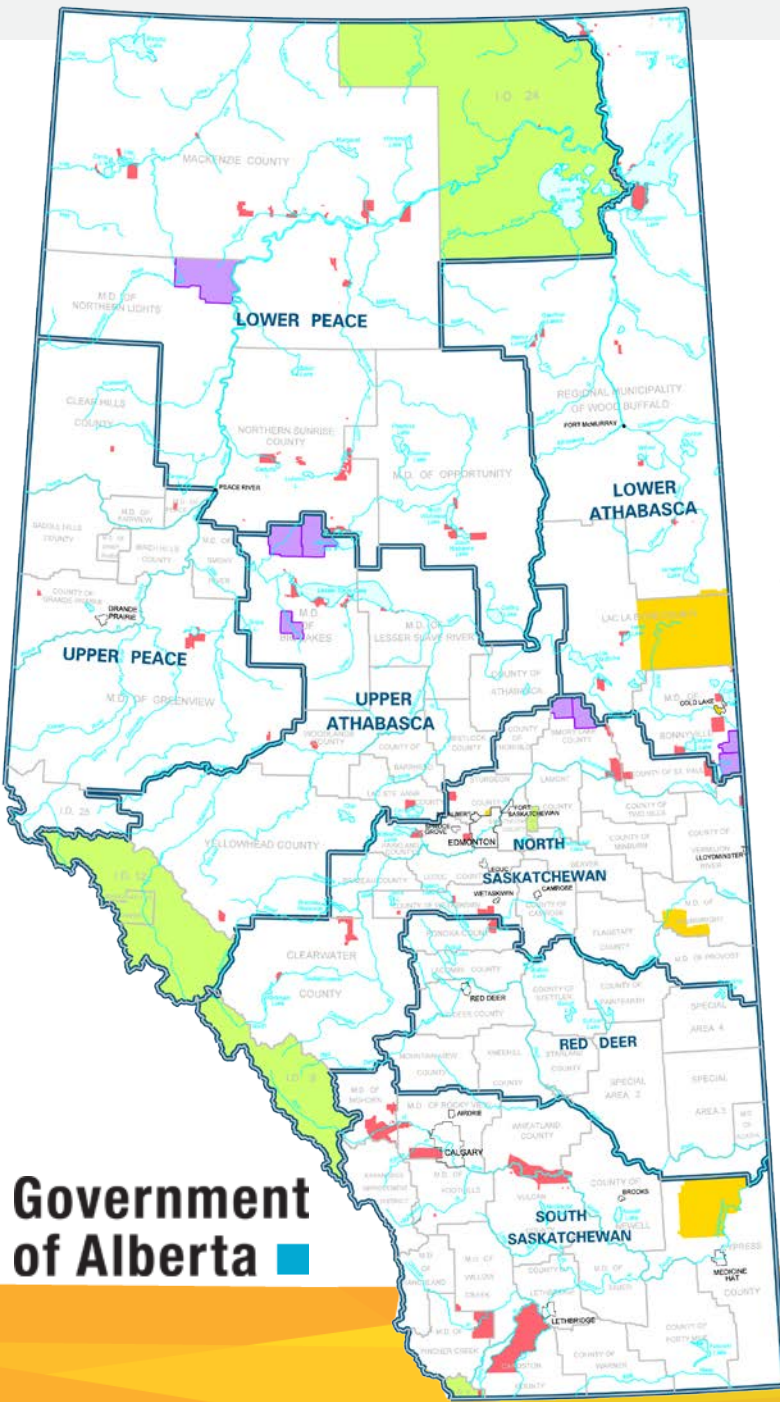
Cumulative Effects

(evolving realities)

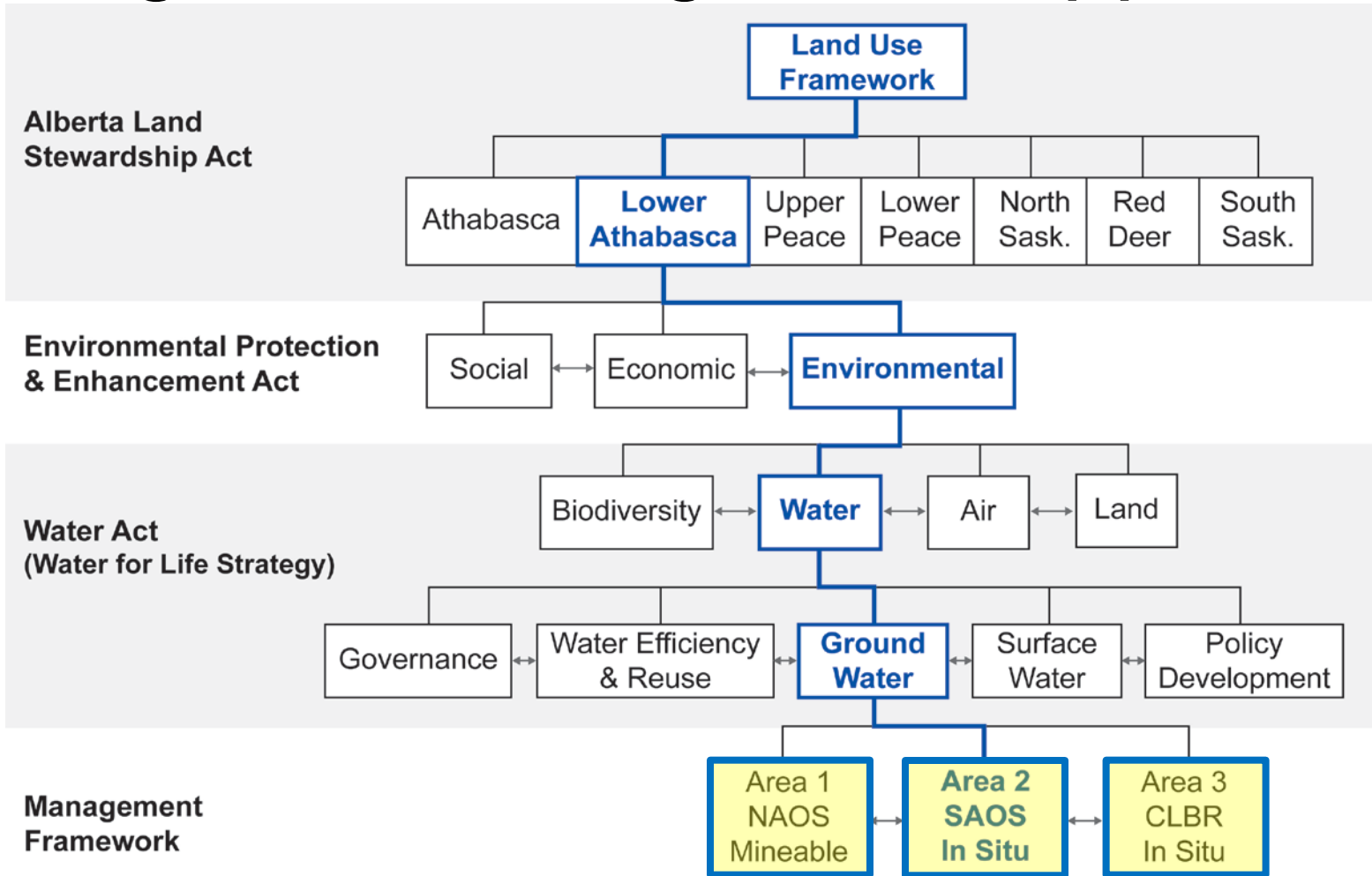


Cumulative Effects Management

1. Land-use regions
2. Regional Advisory Councils for each region
3. Cumulative effects management
4. Strategy for conservation and stewardship on private and public lands
5. Efficient use of land
6. An information, monitoring and knowledge system
7. Inclusion of Aboriginal peoples in land-use planning



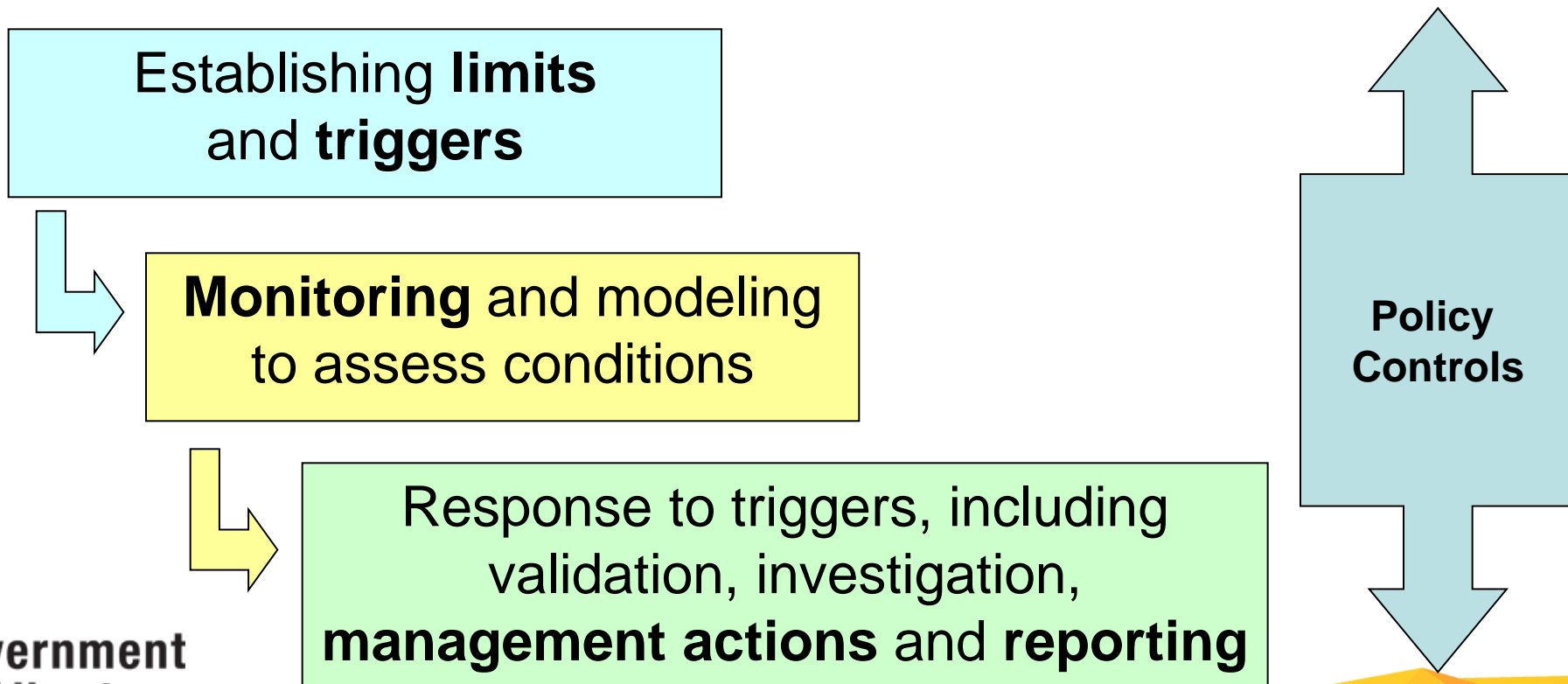
Integrated Management Approach



Evolution of Environmental Management

Provide regional context for decisions about future activities and management of existing activities

→ Shift from one-off authorizations with consideration for current circumstances to decisions based on regional 'expectations'



| General Indicator | Water Quality Triggers | | Water Quality Limits |
|------------------------------|------------------------|------|----------------------|
| | Mean | Peak | |
| Calcium (Ca ²⁺) | 34.7 | 48.8 | 1,000 ^c |
| Chloride (Cl ⁻) | 20.2 | 45.0 | 100 ^c |
| Magnesium (Mg ⁺) | 9.5 | 13.6 | - |
| Potassium (K ⁺) | 1.4 | 2.1 | - |

| General Indicator | Level | Description | Management Intent |
|--|--------------|---|---|
| Sodium (Na ⁺) | 3 | Exceedance of water quality limits | Improve ambient water quality to below limits.. |
| Sulphate (SO ₄ ⁻) | | | |
| Total Dissolved Phosphorus (TDP) | <i>Limit</i> | | |
| Total Phosphorus (TP) | 2 | Exceedance of water quality triggers | Proactively maintain water quality below limits. Improve knowledge and understanding of trends. |
| Nitrate (NO ₃ -N) | | | |
| <i>Trigger</i> | | | |
| | 1 | Mean and peak water quality at or better than historical conditions | Apply standard regulatory and non-regulatory approaches to manage water quality. |

Ensuring a Shared Water Ethic

- **All Albertans** are **stewards** of Alberta's water;
- **Albertans act responsibly** in managing and conserving water, to ensure the **environmental, economic and social health** of the province;
- Albertans recognize the importance of **living within the capacity** of the natural environment as a means of ensuring sustainability of water.
 - *Requires the right level of knowledge by Albertans, and meaningful engagement with all stakeholders, including citizens*
 - *Need to have the right conversation about solutions based on a recognition of:*
 - *Water for communities (including water for food production)*
 - *Water for the environment (to have viable ecosystems)*
 - *Water for economy (linked to the above)*

Providing Assurance ⁽¹⁾

- Key considerations based on recent experiences
 - Information, facts, etc. critical, but low meaning without trust and confidence of source
 - Perceptions play a strong part of current reality
 - Trust and confidence take time to build/re-gain
 - Relationships underpin confidence and trust
 - Honesty is still the best policy

Providing Assurance (2)

- Transparency
 - In management intent
 - In the type and confidence of the data that is collected (and what is not collected)
- Credibility
 - In the systems (including people) used (independence where necessary)
 - In the data collected and provided
- Relevance
 - In the systems used and data collected

Key Drivers

- *Water for Life* has outstanding items to deliver
 - Recommendations in to government on key issues
- Albertans are asking for new ways of engagement
 - Right discussion at the right point in the right way
- Policy uncertainty (based on review commitments) may be a potential barrier to prosperity
 - Municipal growth, unconventional oil and gas development
- Water issues are complex
 - Long-term, societal, holistic

Content

- Key Elements
 - Broad conversation across the province
 - Details would be based on general information about the state of Alberta's water resources
 - o Identification of general opportunities and challenges
 - o Highlight successes and current directions on environmental management
 - o Outline initial areas of potential priority for focus
 - Also about confirming what is not on the table
- Foundation is *Water for Life*
- Pre-cursor to advancing potential policy options to address priority issues

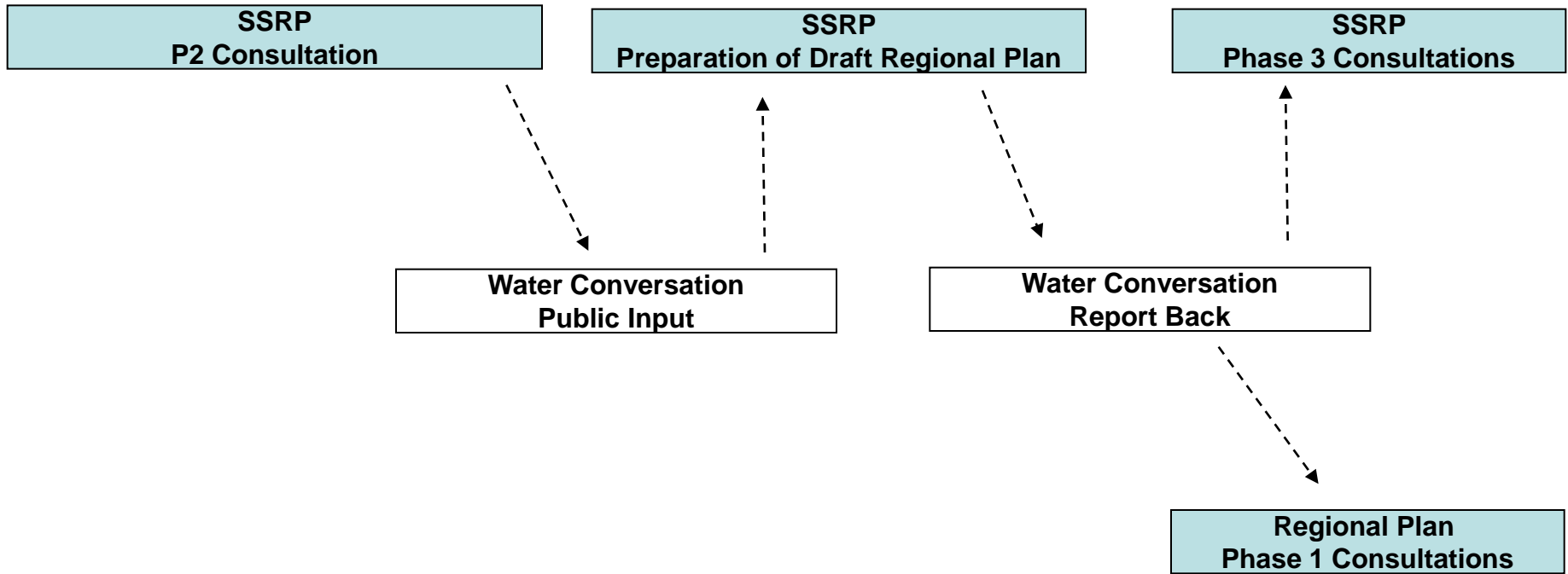
Potential Priority Areas

- Issues that:
 - Span the interests and needs of all Albertans
 - Require more immediate focus and action
 - Have already involved significant analysis and assessment
 - Require action in support of achieving economic, social and/or environmental objectives
- Proposed areas:
 - Water Management
 - Hydraulic Fracturing
 - Healthy Lakes
 - Drinking Water / Wastewater Sustainability

Process

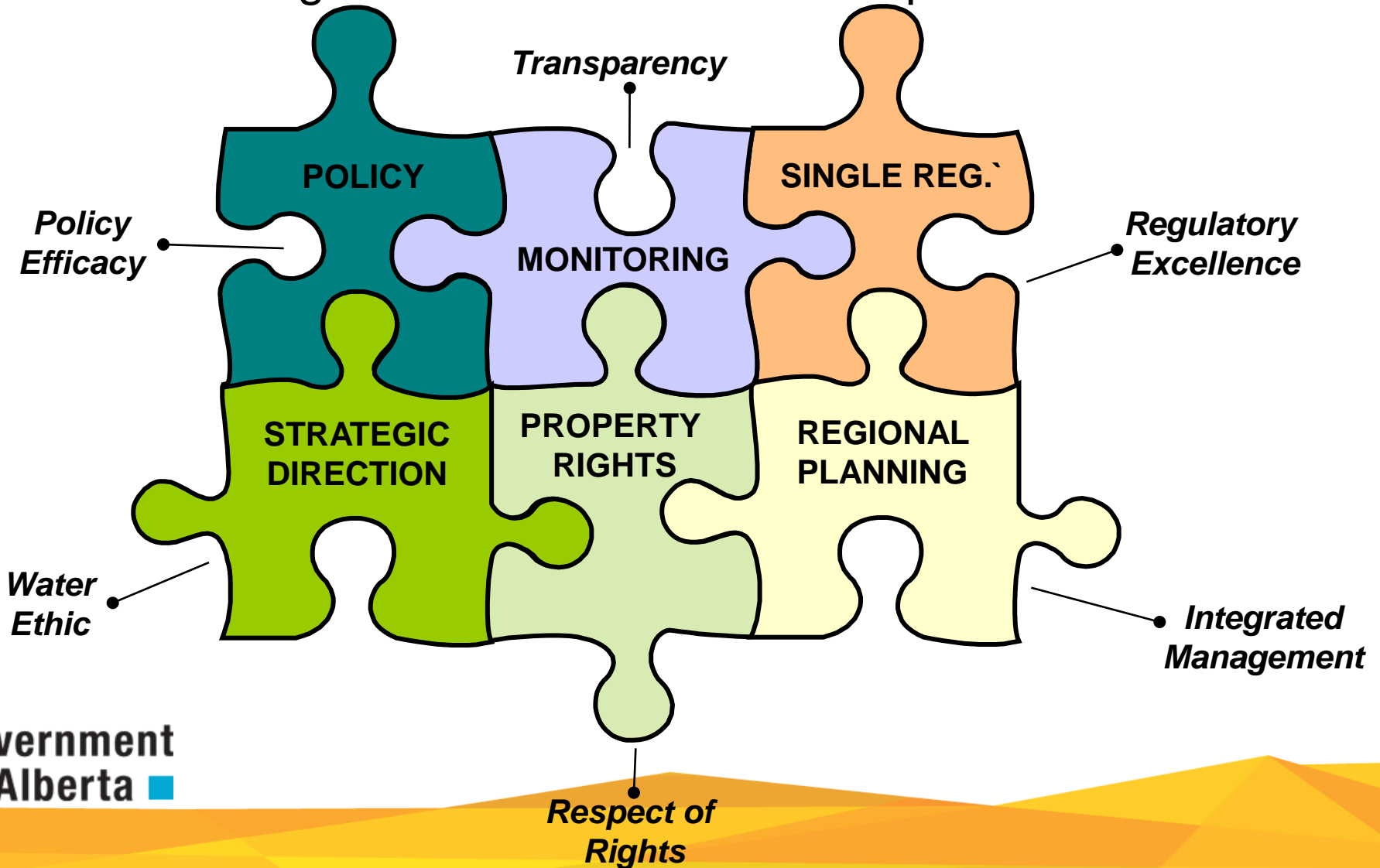
- Water conversation could employ a range of tools
 - Face to face (non-traditional)
 - Social media
 - Use of existing forums and groups
- Emphasis on taking the time to confirm what we heard at the end of the process

Coordination



Responsible Development

- Whole is greater than the sum of the parts



Items for Consideration

- General thoughts on
 - Intent
 - Approach
 - Initial focus areas
- Advice on engagement
 - Sector (e.g. Agriculture)
 - Formal Groups (e.g. AEPA)