

Environmental Management Frameworks for the South Saskatchewan Region

What is an environmental management framework?

An approach for managing the long-term cumulative effects of development on the environment at a regional level. Building on existing Alberta government environmental policy, legislation and regulation, frameworks provide regional context for the long-term management of existing activities and for future development.

What does a framework do?

A management framework:

- identifies desired regional objectives,
- identifies key indicators and regional threshold values, including triggers and limits,
- sets the foundation for ongoing monitoring,
- requires evaluation and reporting on results, and
- provides for communication of the results to Albertans.

Limits are levels at which the risk of adverse effects on environmental quality is becoming unacceptable. **Triggers** are set in advance of limits as early warning signals and support proactive management. Ambient conditions in a region will be monitored as described in the management frameworks. If ambient conditions exceed a trigger at specified monitoring locations, a management response is started.

Key steps in this management response include:

- Verification
- Preliminary assessment
- Investigation
- Mitigative Management Actions
- Oversight/Delivery of Management Actions
- Evaluation
- Communication

The response will depend on the circumstances and the kinds of approaches that will best support regional outcomes and objectives. Management actions can include the use of regulatory tools (such as approval conditions and regulations) and non-regulatory approaches (such as voluntary incentive programs, education and awareness initiatives).

This proactive and dynamic management approach will help ensure negative trends are identified and assessed early on and will reduce the risk that activity exceeds regional limits.



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- An Air Quality Management Framework completed
- A Surface Water Quality Management Framework completed
- A biodiversity management framework in development
- A proposed groundwater management approach to include enhanced regional monitoring and continued groundwater mapping

What is cumulative effects management?

Cumulative effects is the combined impact of past, present, and reasonably foreseeable human activities on a region's environmental objectives. Cumulative effects management recognizes that our watersheds, airsheds, and landscapes have a finite capacity.

Environmental management frameworks take a cumulative effects management approach to managing disturbances and impacts on the landscape. This approach considers the collective impact of all activities in an area on the environment, society and economy.

The fundamental principles of a cumulative effects management system include:

- **Outcomes-based:** clearly defining desired end-states.
- **Place-based:** meeting the differing needs of regions within the province.
- **Performance management-based:** using adaptive approaches to ensure results are measured and achieved.
- **Collaborative:** building on a culture of shared stewardship; using a shared knowledge base.
- **Comprehensively implemented:** using both regulatory and voluntary approaches.

Cumulative effects management integrates tools, resources and relationships to manage activities that affect the environment, economy and social factors in a particular place. It follows an adaptive “plan-do-check” approach to setting, meeting and evaluating place-based outcomes. This approach incorporates new information, technology and tools ensuring it remains a relevant and up-to-date system.

The Government of Alberta is implementing cumulative effects management throughout the province, and the Ministry of Environment and Sustainable Resource Development has a leadership role on the environmental (air, water, land, biodiversity) components.

Cumulative effects management is the approach used by the Government of Alberta under the integrated resource management system. This initiative includes:



- World-leading environmental monitoring;
- Regional plans under Alberta's Land-use Framework;
- The creation of a property rights advocate; and
- A single regulator for oil and gas development.