Groundwater Management Framework for the Lower Athabasca Region

FACTS AT YOUR FINGERTIPS

The Groundwater Management Framework for the Lower Athabasca Region was developed as part of the Lower Athabasca Regional Plan. It is intended to provide a system to manage non-saline groundwater resources across the Region. This framework spans three groundwater management areas, namely, the:

- north Athabasca oil sands area;
- · south Athabasca oil sands area; and,
- · Cold Lake Beaver River area.

The regional plan and the management framework are in effect as of September 1, 2012.

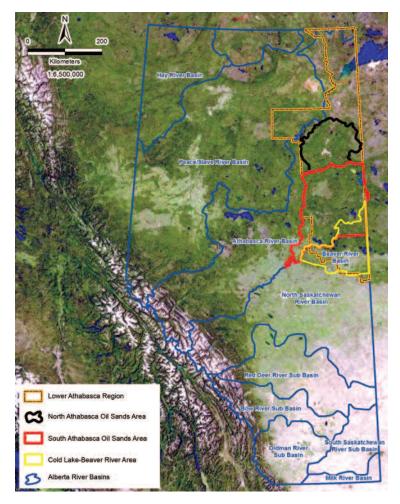
The management framework is complementary to and builds on existing policies, legislation and regulations. The framework aims to manage groundwater resources in a sustainable manner and protect these resources from contamination and over-use.

The goals of the Groundwater Management Framework are to:

- Establish the baseline groundwater conditions and range of natural variability in the Lower Athabasca Region to facilitate enhanced knowledge and detection of change.
- Provide a consistent approach to understanding potential effects from all development activities on the surrounding environment.
- Facilitate projections of change based on future scenarios, such as expanding development or climate variability and change.
- Support and supplement the current pollution prevention and risk management principles as part of groundwater quality and quantity management.

The management framework is intended to be fully integrated with a comprehensive approach to monitoring, modelling and management.

Development of a regional groundwater monitoring network is one of the commitments in the framework. The aim of this network is to ensure timely detection of changes to key indicators. The management framework identifies a suite of key indicators and sets interim regional groundwater quality triggers. These interim triggers have been set based on statistical deviation from baseline concentrations, regional knowledge and professional judgment, or provincially accepted water



quality guidelines where applicable. The framework describes plans to develop final regional triggers and limits. After these final regional triggers and limits have been established, the management response described in the framework will be required if a trigger or limit has been exceeded.

In addition to regional triggers and limits, there will also be site-specific triggers. These site-specific requirements will be identified in authorizations under the *Environmental Protection and Enhancement Act* and the *Water Act* and in facility Groundwater Management Plans, as described in the management framework. Ensuring compliance with these requirements will greatly reduce the chance of any regional effects.

For more information, call the Information Centre at 780-427-2700 (outside Edmonton dial 310-0000).

