RESOLUTION 5-19
MULTI-STAKEHOLDER COMMITTEE TO WORK AT REDUCING THE USE OF FRESH WATER BY THE OIL AND GAS INDUSTRY IN ALBERTA

WHEREAS there is a concern about the enormous loss of fresh water (see Reference 1) by the oil and gas industry in the hydro-fracking and water injection processes (see Reference 7 and 8);

WHEREAS the oil and gas industry is licensed over one billion cubic metres of fresh water annually;

WHEREAS fresh water is a critical resource to Alberta's agricultural producers;

WHEREAS free and easy access to fresh water for enhanced oil recovery acts as a disincentive for oil and gas companies to pursue alternate methods such as CO2 injection, light oil hydro-fracking or to drill deeper to locate and pipe saline water (see Reference 3 and 7) for injection purposes;

WHEREAS the Brazeau County Agricultural Service Board is concerned with the amount of fresh water used in the fracking and water injection process;

WHEREAS the Council of Brazeau County recently moved a Motion requesting a multi-stakeholder committee be struck to look at reducing the use of fresh water by the oil and gas industry;

THEREFORE BE IT RESOLVED
THAT ALBERTA'S AGRICULTURAL SERVICE BOARDS REQUEST
that the Provincial Agricultural Service Board Committee request the Government of Alberta to immediately strike a multi-stakeholder committee to work at reducing the use of fresh water by the oil and gas industry in Alberta.

SPONSORED BY: Brazeau County

MOVED BY: _____

SECONDED BY: _____

CARRIED: _____

DEFEATED: _____

STATUS: Provincial

DEPARTMENT: Alberta Environment and Parks

BACKGROUND INFORMATION

A reliable water supply for a sustainable economy is one of the key goals of Water for Life, Alberta's Strategy for Sustainability. The Advisory Committee on Water Use Practices and Policy was formulated in 2003 to examine the use of fresh water for underground injection. The Government of Alberta working in partnership with industry, interest groups and non-government organizations developed the Water Conservation and Allocation Policy for oilfield injection, with a goal to reduce or eliminate the allocation of non-saline water for deep well injection. Applications for the use of fresh water for injection continue to be filed with the Energy Resources Conservation Board, and are approved on the basis that there is no economical alternative (saline water or carbon dioxide) that is available or because the diversion of ground water was previously approved through the licensing process. Currently the oil industry holds licenses for up to 32 million cubic meters of ground water diversion. The suggestion that use of non-saline ground water for enhancing oil field production is the most economical means is found on the premise that ground water has no dollar value. Such is not the case for those communities in Alberta that must pipe water to support the residents. Alberta's agricultural producers rely on the province's fresh water resources for crop and livestock production. Water is a critical resource to agricultural industry. With the ever-increasing drought conditions across the Prairie Provinces, ground water is becoming a scarce resource that must be conserved. Fresh water flooding of oil fields results in the water being lost to the eco-system forever.

<u>REFERENCES</u>

1. Potable Water – Drinkable – Fit to Drink

2. Fresh Water – Non-saline

3. Non-potable/Saline Water – Brackish – Unfit to Drink

4. Surface Water – Water collected on the ground or in a stream, river, lake, wetland, or ocean, it is related to water collecting as ground water or atmospheric water.

5. Ground Water – Water located beneath the ground surface is soil pore spaces and in the fractures of rock formation. A unit of rock or an unconsolidated deposit is called an aquifer when it can yield a usable quantity of water.

6. Water Table – Underground depth at which point the ground is totally saturated by water. The level of a water table can fluctuate considerably. When underground water deposits are large enough to be considered sustainable for use, they are known as aquifers.

7. Fracking – Source Watch

- **Fracking also referred to as hydraulic fracturing or hydro fracking.** A process in which a fluid is injected at high pressure into oil or methane gas deposits to fracture the rock above and release the liquid, (oil/gas) below.
- **Light-Oil Fracking** – Alternative method using light oil for fracking
- **Hydro-Fracking** – Process in which water is used as the fluid in fracking
- **C02-Fracking** – Process in which carbon dioxide is used as the injection fluid in fracking

8. Hydraulic Fracture – Formed by pumping the fracturing liquid into the wellbore at a rate sufficient to increase the pressure downhole to a value in excess of the fracture of the formation rock.

9. Water Cycle – AKA Hydrologic Cycle or H20 Cycle – Describes the continuous movement of water on, above and below the surface of the Earth.

10. ERCB – Energy Resources Conservation Board

11. EUB – Alberta Energy and Utilities Board

A resolution, passed and advocated for by the Rural Municipal Association (formerly Alberta Association of Municipal Districts and Counties) recently expired. Following is the resolution and its responses.

7-07F (expired): THEREFORE BE IT RESOLVED that the Alberta Association of Municipal Districts and Counties requests that the Government of Alberta implement an immediate moratorium on new water licenses for deep well flooding with fresh groundwater, in all areas of the province where groundwater IS AND MAY BE required for human consumption; and

FURTHER BE IT RESOLVED that the Alberta Association of Municipal Districts and Counties request the Government of Alberta to implement a one-year timetable for the cancellation of existing water licenses that allow deep well flooding with fresh groundwater, in all areas of the province where groundwater IS AND MAY BE required for human consumption; and

FURTHER BE IT RESOLVED that the Alberta Association of Municipal Districts and Counties draft a petition based on these two clauses and send it out to municipalities who want to participate, so that the will of the people can be expressed on this vital issue.

Government Response:

Environment and Water:

To minimize the use of fresh water for oilfield injection, industry must adhere to the Water Conservation and Allocation Policy for Oilfield Injection. Since 2006, there has been a significant reduction in the use of fresh water for oilfield injection, particularly in areas with limited water sources. Alberta Environment and Water is always striving to improve our policies and practices in an effort to meet the unique needs and challenges we face here in Alberta.

Energy/ERCB:

Alberta Energy is committed to the safe and sustained development of Alberta's energy resources. There have been significant reductions in the use of fresh water for oilfield injection since 2006, particularly in areas with limited water supplies. Oil and gas developers are strongly encouraged to use alternatives to fresh water in these areas and new oil development projects are required to demonstrate that all feasible options were evaluated and that only non-saline water resource use will prevent stranding oil resources. Policies on water use for oil and gas injection are being reviewed to ensure fresh water use is minimized by all upstream oil and gas activities including hydraulic fracturing.

Development:

While both the Ministry of Environment and Sustainable Resource Development and the Ministry of Energy note policies are either in place or under review to encourage minimal use of fresh water for the extraction of oil and gas reserves, neither indicates that a total cessation is contemplated or feasible. As such, the AAMDC finds this response Unsatisfactory and will continue to advocate on this issue through ministerial meetings.

Provincial Ministries: Energy, Environment and Sustainable Resource Development

Provincial Boards and Organizations: ERCB