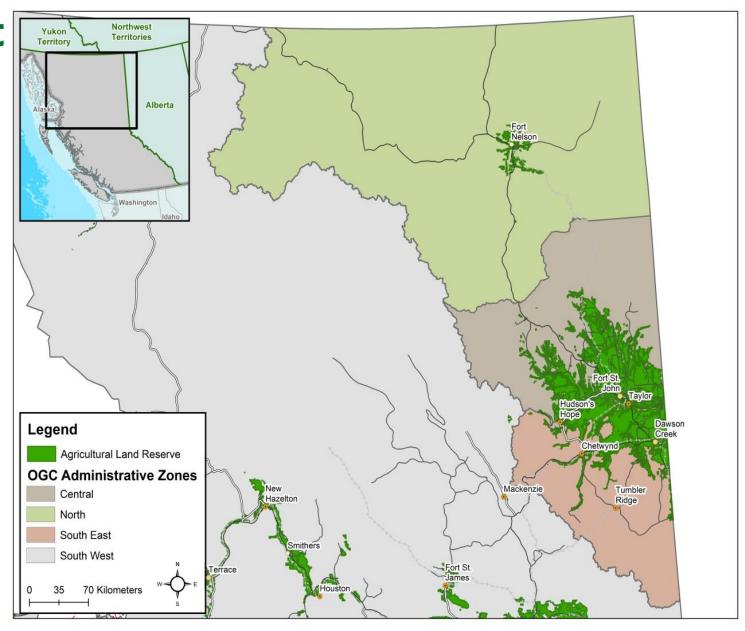






- Oil and Gas Impactson the ALR
- 2. History of Oil and Gas Activities in the ALR
- 3. OGC Delegation Agreement
- 4. OGC Annual Report Statistics

Context





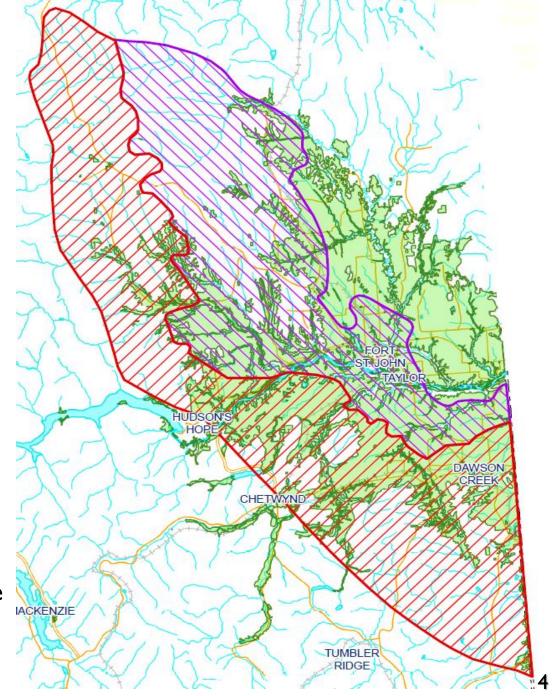
Montney Wet and Dry Gas Regions



Wet Gas



Agricultural Land Reserve



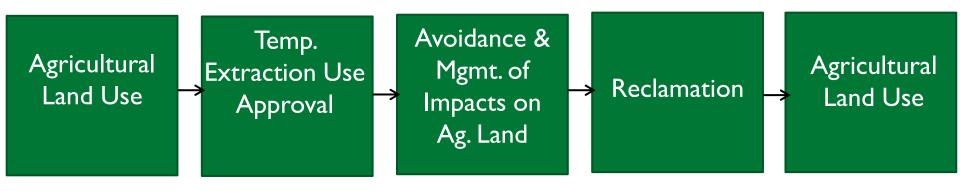


Oil and Gas Impacts on the ALR

- Disturbance and loss of soil resource
- Location, extent and density of oil and gas uses
- Impact on agricultural landscape and land use
- Reduction of capability of land for agriculture
- Interruption of field patterns and isolation of producing lands
- Appropriate reclamation to an agricultural standard



Philosophy of Temporary Oil and Gas Use in the ALR



Land Remains in the Agricultural Land Reserve throughout entire process





General Order #4473/1976:

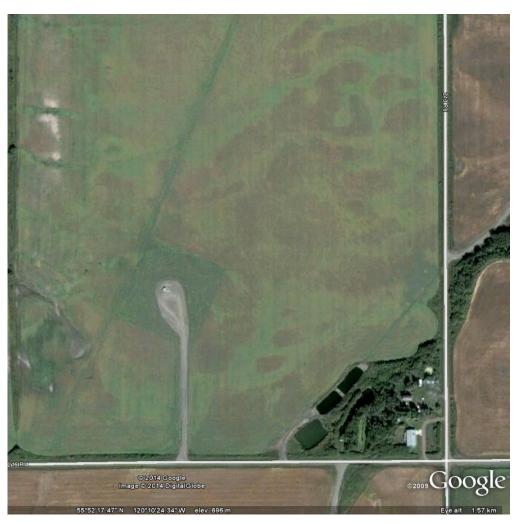
- Exempted applications in the Peace River-Liard Regional District for:
 - Oil and gas well sites and ancillary buildings and equipment occupying <2 acres (0.8 ha);
 - Exploratory sites and ancillary buildings and sump pits; and,
 - Roads and gathering and flow line rights-of-way.



General Order #4473/1976:

- Required that:
 - Well / exploratory site rehabilitated to original or better topographical and soil conditions when abandoned;
 - Any pipeline constructed for gathering purposes must not restrict agricultural use of the land; and,
 - During construction topsoil must be conserved and replaced when pipeline is backfilled.

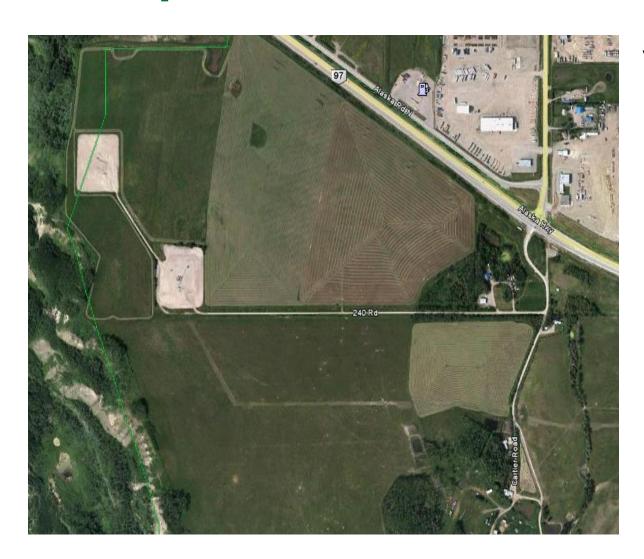




A wellsite in the centre of a $\frac{1}{4}$ section.

Note the teardrop "finish", but the disturbed lease area and pipeline.





Well sites under construction in Fort St. John.

Note the disrupted field pattern.



Example: wellsites interrupting fields





General Order #132/1982:

- Established specifics around site development and reclamation standards;
- Required normal spacing areas for oil and gas wells on parcels 16 ha or larger, specifically:
 - one gas well site per section (259 ha); and/or,
 - one oil well site per $\frac{1}{4}$ section (65 ha);
- Expanded area permitted for oil and gas sites and ancillary buildings/equipment to 2 ha per 1/4 section.



General Order #293/1995:

- Exempted applications in the Peace River Regional District and Fort Nelson-Liard Regional District for:
 - Geophysical exploration for oil and gas;
 - Pipelines less than 5 km in length;
 - Two well sites per ¼ section on new surface leases to a maximum area of 5 ha; and,
 - A new well on an existing surface lease where the site had already been disturbed.
- Conditions of exemption included reporting requirements and enhanced reclamation standards.



Delegation to the CEO - 1997:

- Decision-making delegated for non-exempted oil and gas activities to CEO.
- Streamlined the non-farm use application process and reduced application response time to oil and gas producers for the following:
 - Third or more well sites;
 - Pipelines longer than 5 km;
 - Combined oil and gas development beyond 5 ha per ¼ section;
 - All battery, compressor, production or processing facilities;
 - Change in use of a surface lease; and,
 - All waste management facilities





OGC Delegation Agreement

- 2002: Section 26 of the ALCA amended to give ALC power to delegate decision-making powers to an "authority" and to exempt activities from application through that delegation.
- **2004**: ALC delegated decision-making authority for two years to the OGC for <u>non-farm uses</u> associated with oil and gas production facilities.
 - Exempted applications for oil and gas activities and pipelines
 7 ha per ¼ section.
 - >7 ha triggered NFU application to ALC.
 - Replaced General Order #293/1995 and delegation of decision-making to CEO.



OGC Delegation Agreement

• Auditing provision: ALC responsible to audit OGC decisions as per the original 2004 ALC/OGC Delegation Agreement:

• 2005 Audit: Former Commissioner Hadland reviewed 32 wellsites, 7 pipelines and 7 facilities (out of 391). General findings confirmed that the industry understood topsoil conservation, but had limited oversight or monitoring:

• **2009 Audit:** Forest Practices Board (reviewed 105 of 907 wellsites). Recommended better training of operators in stripping topsoil, and better oversight of reclamation.



Example: Gas processing plant





Example: Fracking operation





Example: Multi-well site





OGC Delegation Agreement - Updates

- 2006 & 2010: Delegation extended.
- 2013: Delegation agreement rewritten to mitigate ALC and oil and gas industry conflicts:
 - Decreased threshold for permitted oil and gas uses to 20 ha/Section due to technical changes to industry, i.e. multiwell sites;
 - All applications for facilities greater than 20 ha delegated to OGC (prompted by ALC delays in decision-making and interference with oil and gas planning);
 - Voluntary siting hierarchy established for facilities (low capability, forested, etc.)
- 2017: Delegation updated minor updates about reporting and soil assessment.



Current OGC Delegation Agreement

- Oil and gas facilities less than 20 ha per section permitted without application;
- OGC makes decisions on facilities greater than 20 ha;
- Requires:
 - Stripping/stockpiling topsoil;
 - Schedule A pre-site assessment report;
 - Schedule B reclamation/closure report for all abandoned facilities;



Current OGC Delegation Agreement

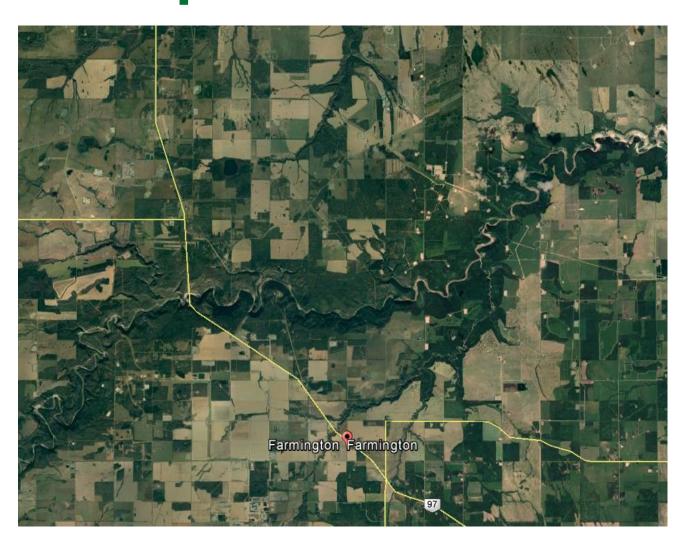
- Provides criteria for siting facilities based on soil capability, level of agricultural development, etc.;
- Bestows OGC responsibility for Compliance and Enforcement;
- Requires OGC to provide annual reports to ALC for auditing purposes, including:
 - No. of NFU's permitted;
 - No. and summary of inspections/enforcement actions undertaken.





Oil and Gas in Farmington





Oil and Gas in Farmington





2003 snapshot of Rolla – Class 3 soils





2017 Rolla same location as previous slide.

Constructed and planned facilites are shown in red and yellow





OGC Annual Report 2018/2019

• 25,965 ha of land in the ALR in the Peace River Regional District is affected by oil and gas development (1.95% of ALR land in the region).

• 1250 ha of new surface land use clearing occurred in 2018/2019 in the ALR.



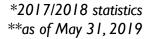
OGC Annual Delegation Statistics

Year	No. of Decisions	Area (ha) Affected by Decisions	No. of Exempted Activities	No. of Schedule B Reports Received	No. of Inspections
2018/2019	25	180		201 (953)	1262
2017/2018	38	302.3	-	44 (326 ha)	1694
2016/2017	28	159	Prior to 2013	1976	
2015/2016	26	- /	decisions for ap	1793	
2014/2015	29	- /	297	26	256
2013/2014	0	0	256	94	73
2012/2013	0	0	276	120	3
2011/2012	0	0	429	85	6
2010/2011	0	0	661	162	3
2009/2010	12	-	683	89	17
2008/2009	-	-	-	105	-
2007/2008	3	-	618	81	13
TOTAL	161	-	-	-	-



Oil and Gas Activities in the ALR

Oil and Gas Activity	Area (ha)		Area (%)		Total Area	Total Area
	Crown	Private	Crown	Private	(ha)	(%)
Pipelines	4356	3939	33	29	8777	62
Well Sites	3631	6888	27	52	10,682	79
Roads	2201	909	17	7	3256	24
Other (ancillary)	1241	1577	9	12	3250	21
TOTAL	11,429*	13,313*	-	-	25,965**	-





Minister's Independent Advisory Committee Need for Immediate Action

Mitigating the impacts of oil and gas activity in the ALR:

 The IAC believes there is a policy imbalance threatening the productive agricultural land base in the North East.

STATUS UPDATE:

Early discussions between AGRI, EMPR, the ALC and the OGC underway. All are committed to working together to try and assess the impacts of O&G on Agriculture in the NE & finding ways to mitigate potential impacts in order to achieve greater balance between Agriculture and OGC objectives in the area



