

An Overview of the Regulation of Water Use in BC for the Oil and Gas Industry

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Overview

- **The Fine Print**

- The information provided in this presentation is for informational purposes only and does not constitute legal advice. Although we have made every effort to ensure the accuracy of the information provided, it should not be acted or relied upon without retaining and consulting with counsel. The opinions expressed during the course of this presentation are solely those of the authors. Any questions regarding the content of the presentation should be directed to them.

Overview

From the *Water Act* to the *Water Sustainability Act*

- History
- Development
- Important Changes

CURRENT REGULATORY FRAMEWORK

The *Water Act*, R.S.B.C. 1996, c.483

- 1909 - First Enacted
- 1912 - Office of Comptroller of Water Rights
- 1939 - Regulation streamlining the Act
- 1960 - Provisions for regulating groundwater

The Oil & Gas Commission

- **OGC formed in 1998**
- **Consolidated oil and gas authorities in one organization**
- **Efforts to streamline continued - *Oil and Gas Activities Act* and supporting Regulations**

Water Uses

- **Completions (Fracking)**
- **Drilling**
- **Seismic**
- **Water floods**
- **Facilities**
- **Roads**
- **Pipeline testing**

Water Sources

Surface

- Rivers
- Lakes
- Borrow pits

Subsurface

- Aquifers
 - fresh (shallow)
 - saline (deep)

Historical Water Use

TABLE 2 - QUARTERLY WATER WITHDRAWALS (m³) FROM SECTION 8 APPROVALS, 2011 Q1 - 2014 Q3

	Q1	Q2	Q3	Q4	SUM
2011	782,388	662,767	1,266,317	1,100,613	3,812,085
2012	1,345,289	982,376	1,088,192	340,607	3,756,464
2013	1,061,417	482,054	605,408	747,986	2,896,865
2014	1,135,656	569,758	616,073		2,321,631

Source: OGC Q3 2014 Water Use Summary

Permits & Licenses

Temporary Water Permits

- Permits use of water for a period of up to 24 months
- Upwards of 250 active temporary water use permits held by companies in Northeastern B.C.

Water License

- No delegated authority to OGC
- Applications are more comprehensive and generally take longer to get approval

Oil and Gas Activities Act and Regulations

- **October 2010 OGAA brought into force**
 - **Drilling and Production Regulation/Environmental Protection and Management Regulation**
- **Enhanced groundwater protection – shallow fracturing; increased casing depth requirements, record of fracking fluids**
- **Changes to waste water disposal and storage requirements**

Groundwater Extraction

- **B.C. is the only jurisdiction in Canada to not regulate groundwater extraction...for now**
- **However, OGAA and Regs require companies using groundwater for fracking and other purposes to account for such withdrawals**
 - Water source well permitting and reporting
 - Increased enforcement
 - Recent changes - additional testing, data collection and monitoring

New Water Source Well Requirements

Shallow < 600m

- Drilling: geological conditions must be logged and well registered with Provincial Wells Database
- Hydrogeological Assessment: desktop review/field reconnaissance/pumping test
- Monitoring – groundwater monitoring wells/long-term monitoring program
- Water Quality Sampling & Analysis
- Data Collection & Interpretation

New Water Source Well Requirements

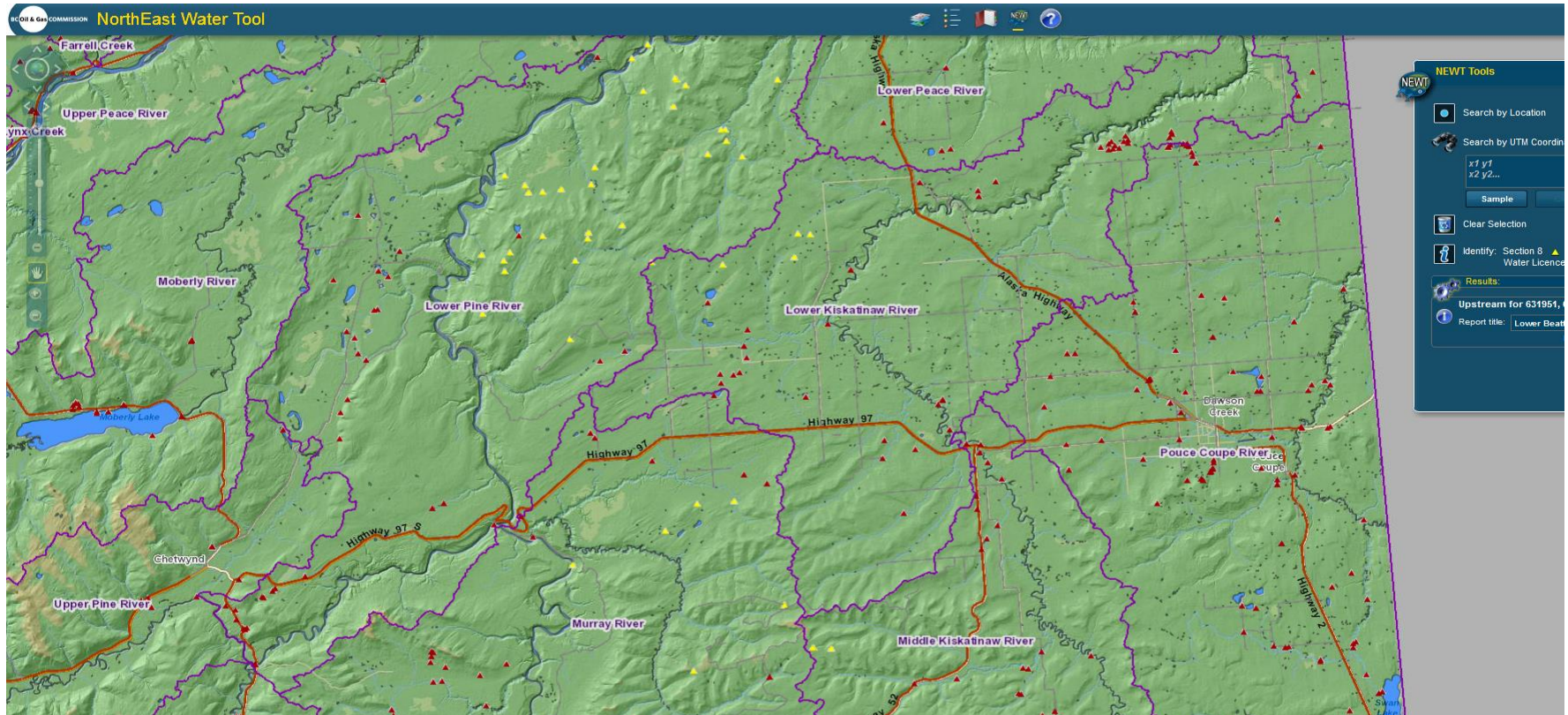
Deep > 600 m

- Drilling logs, water sampling, monitoring well and long-term monitoring program required
- Other requirements - hydrogeological interpretation, monitoring, reporting etc. at discretion of OGC

What about Rainwater?



Northeast Water Tool (NEWT)



Development of a New Act

- **Consultation Begins - 2009**
 - Policy Proposal - 2010
 - Legislative Proposal - 2013

- **Bill 18 – March 11, 2014**
 - Passed 3rd reading April 29, 2014
 - Not yet in force (January 2016?)

Water Sustainability Act Overview

- **Stated Goal:**

"To develop a new legislative framework based on risk, competing demands and scarcity, and enable an area-based approach for water management."

Key Policy Directives:

- 1. Protect stream health and aquatic environments**
- 2. Consider water in land use decisions**
- 3. Regulate and protect groundwater**
- 4. Regulate water use during times of scarcity**
- 5. Improve security, water use efficiency and conservation**
- 6. Measure and report large-scale water use**
- 7. Provide a range of governance approaches**

Regulation of groundwater

- **Establish a regulatory framework for existing and new groundwater use**
- **FITFIR would apply**
- **Transition period of 3 – 5 years for existing users**

Deep Saline Groundwater

- **Not exempted from the WSA**
- **Listed in pricing regime, but no rental or application fees**
- **Deep saline groundwater will be regulated, but at this point, no fees incurred for use**

Authorizations Granted and Rights Acquired

- **Two forms of authorizations – licences and use approvals**
- **Conditional licences can be transitioned to final licences**
- **Rights granted are use rights, not property rights**

Beneficial Use

- **Licencee must make regular beneficial use of the water or can be revoked.**
- **May be required to provide a declaration of beneficial use which will pertain to the immediate 3 year period**
- **Act includes definition of beneficial use – includes an efficiency component**
- **Decision maker can audit use**

Approval Process

- **Must apply in the manner and form prescribed and pay appropriate fee**
- **Must include information about other uses affected**
- **Decision maker given discretion to collect information and verify information collected**
- **Applicant must give notice to potentially affected users**
- **Notified users can object and the decision maker can order a hearing if warranted**

Environmental Flow Needs

- **Decision Maker must consider environmental flow needs (EFNs) for new licence/short-term approvals**
- **EFNs refer to the “quantity and timing of flows in a stream that are necessary to sustain freshwater ecosystems.”**
- **Expand prohibitions on dumping debris**
- **Consider all waters “hydraulically connected”**
- **More consideration of sensitive streams**
- **Water objectives must be considered**

Precedence of Rights

- **First in Time, First in Right**
- **But, if registered on the same day, a ranking:**
 - (a) domestic
 - (b) waterworks
 - (c) irrigation
 - (d) mineralized water
 - (e) Mining
 - (f) industrial
 - (g) oil and gas
 - (h) power
 - (i) storage
 - (j) conservation
 - (k) land improvement
- **But, rights can always be overridden in times of need**

Regulation During Scarcity

- To protect “Critical Environmental Flows” specific modifications to FITFIR would be permitted.
- “Environmental Flow Needs” concern long term flow threshold, when granting new licences.
- Critical Environmental Flows concern a short term flow threshold, below which irreversible harm to the aquatic ecosystem may occur.
- “Essential Household Use” would trump FITFIR.
- Would be decided by Comptroller of Water Rights or Regional Water Manager.

Increased Enforcement and Penalties

- **Increased investigative powers**
- **Administrative Monetary Penalties**
- **Entitled to notice and a hearing**
- **Entitled to an appeal to the Environmental Appeal Board**

Schedule of Application and Rental Fees

- **BC just released its Detailed Fees and Rentals Schedule – to be implemented in 2016**
- **Pricing is based on principles including, simplicity, fairness, impact on resources, cost recovery, efficiency and health**
- **Fees vary based on volume and type of use**
- **Highest Application Fee - \$10,000**
- **Highest Rental Rate - \$2.25 per 1,000 m³**
- **Rental rates still among lowest in country**

Application and Rental Fees for Oil and Gas Use

- **Oil Field Injection and Hydraulic Fracturing:**
 - **Application Fees:**
 - Less than 500 m³/day - \$1,000 (was \$500)
 - Between 500 m³/day and 5,000 m³ per day - \$5,000 (was \$500)
 - Over 5,000 m³/day - \$10,000 (was \$500)
 - **Rental Fees:**
 - \$2.25 per 1,000 m³ (was \$1.10 for injection, \$0 for Hydraulic Fracturing)
- **No application or rental fees for deep saline groundwater for either.**
- **Drilling:**
 - \$1,000 Application Fee
 - \$2.25 per 1,000 m³

THANK YOU

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