

Water Storage Sites and Dams

Are Water Storage Sites also Dams?

Oil and gas companies typically store fresh water in various water storage structures such as dugouts, water reservoirs, tanks, c-rings and other similar structures in preparation for using the water in their activities, most notably for hydraulic fracturing.

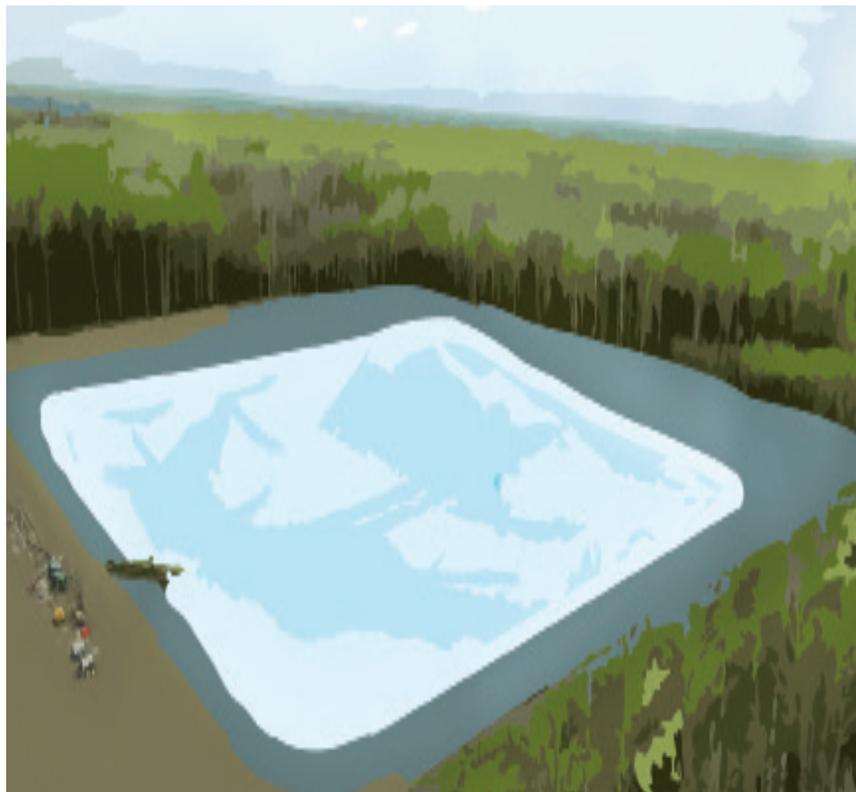
Some of these qualify as dams under the Dam Safety Regulation (DSR) of the Water Sustainability Act (WSA), which took effect on Feb. 29, 2016. Except for minor dams (i.e. dams with live storage volumes of <math><10,000\text{ m}^3</math>), these dams are subject to Part 2 of the DSR and must be approved under water licences. Since 2014, Commission staff have had authority to issue water licences for oil and gas purposes and starting in 2016 staff were given authority under the DSR to approve and inspect dams to ensure they are in compliance and will remain safe to the public and environment.

Companies must submit detailed applications to the Commission regarding the construction and maintenance of dams, as well as identifying the volumes of water stored.

Depending on their location and source of water, these storage sites may also require Crown Land use applications to divert water from a stream or aquifer. The Commission requires companies to report water used in oil and gas activities that is diverted from a stream or aquifer.



The Commission has put in place new procedures to ensure all dams and water storage structures used in oil and gas development are properly licenced and safe for use. This starts the moment an application is submitted - it is tagged and subjected to a rigorous review that includes available water sources, environmental impacts of dam construction, detailed engineering design and other environmental and safety considerations. Companies must meet all requirements and any conditions imposed by the Commission before any authorization is granted to construct or use a structure.



For Further Information

Email ogc.communications@bcogc.ca or call 250-794-5200

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This information is published by the BC Oil and Gas Commission and is available online at www.bcogc.ca

Our Role in Regulating Dams

Following the introduction of the WSA in 2016, the Commission, working with Forests, Lands, Natural Resource Operations & Rural Development (FLNRORD), became aware that a number of water storage structures approved by the Commission were defined as dams. This meant these structures, approved by the Commission with short-term water permits, required a water license and dam authorization and thus did not comply with the WSA. The Commission requires the operators of water storage structures, with live storage volumes of <10,000 m³, to submit the necessary applications, including assessments and any necessary design modifications done by qualified engineers. The Commission reviews all of them to ensure timely decisions are made in accordance with applicable regulatory and legal requirements.

Did You Know?

- ✓ The Commission has launched two new features on the [website](#) to ensure full transparency:
 - The [Compliance and Enforcement page](#) shows all orders and determinations issued to oil and gas operators.
 - The [Regulated Dams page](#) displays all Commission-regulated dams.
- ✓ The Commission require operators of water storage structures to submit all necessary applications. The application includes assessments and any necessary design modifications done by qualified engineers. The Commission then reviews all the information and ensures timely decisions are made in accordance with applicable regulatory and legal requirements.
- ✓ The Commission has taken an expanded role with designating existing staff and hiring new staff that will be designated as dam safety officers and engineers. They will ensure the proper oversight of dams used for oil and gas purposes.

Regulatory Compliance

The Commission's strategy for bringing dams into regulatory compliance:

- A review of permitted oil and gas water storage structures was carried out in 2016. At that time, these structures had been granted Crown land access for the purposes of water storage and the corresponding water use was permitted under Section 8 of the former Water Act in accordance with the Commission's authority.
- The Commission identified a number of structures that qualify as dams and as such, required licenses under the new Water Sustainability Act.
- The Commission is working with partner agencies – the Environmental Assessment Office and FLNRORD – to ensure full compliance and the correct licensing is in place. Part of that work includes detailed engineering reviews.
- The Commission continues to inspect these structures and is applying additional requirements of the Dam Safety Regulation.



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1-250-794-5200 (24-hour public number)
Report concerns such as odours, spills or noise.
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