

# Dam Safety Regulation

REQUIREMENTS FOR DAM OWNERS

*February 29, 2016*



BRITISH  
COLUMBIA

## ***What is the new Dam Safety Regulation?***

The Dam Safety Regulation (DSR) under the *Water Sustainability Act* (WSA) came into force on February 29, 2016 replacing the British Columbia Dam Safety Regulation under the old *Water Act*. The DSR requires dam owners to inspect their dams, undertake proper maintenance and ensure that their dams meet ongoing engineering standards to minimize the risk to people, property and the environment.

The WSA includes regulation of groundwater for the first time in B.C. This means that owners of dams that store or divert groundwater from an aquifer, may be subject to the DSR.

## ***What is the new definition of a dam?***

Under the DSR, the definition of “dam” has been expanded to include structures that store or divert groundwater as well as water from a stream. A dam is now defined as a barrier constructed for the purpose of enabling storage and diversion of water diverted from a stream or an aquifer, or both, and includes other works incidental to or necessary for the barrier (such as buildings, roadways, lighting, fences or railings).

## ***Application of the regulation***

The DSR *applies* to all dams that store or divert water with the following exception:

- The DSR *does not apply* to minor dams which are less than 7.5 metres in height and capable of impounding a volume of water of 10,000 m<sup>3</sup> (equal to 4 Olympic size swimming pools) or less, unless the Comptroller of Water Rights or a Water Manager deems them to be potentially hazardous.

Part 3 of the DSR only applies to dams that:

- are 1 metre or more in height and able to impound greater than 1,000,000 m<sup>3</sup> of water;
- are 2.5 metres or more in height and able to impound greater than 30,000 m<sup>3</sup> of water;
- are 7.5 metres or more in height able to impound any volume of water, or
- have a dam failure consequence classification of significant, high, very high or extreme (see Schedule 1 of the Regulation).

A dugout or temporary water storage reservoir *may* be subject to the DSR if it meets the definition of “dam” in the DSR.

## ***Dams not subject to the regulation***

Not all dams or barriers in B.C. are subject to the DSR. Mine impoundments such as sediment control or sludge ponds, diversion channels, or tailings storage facilities are regulated under the *Mines Act* and the Health, Safety and Reclamation Code for Mines in B.C. by the Ministry of Energy and Mines. Sewage lagoon structures are regulated by the Ministry of Environment.

In addition, the DSR does not apply to: dikes and sea walls; particular types of off-stream artificial storage (e.g., tanks, swimming pools, dugouts without berms); underground structures including aquifers, cisterns, caverns and caves; and barriers created by beavers, ice jams, landslides, and other natural causes.

## ***Important changes for dam owners***

### » **Definition of “Dam”**

Dams now include those structures that impound water from an aquifer as well as those that impound water from a stream, and those that do both.

### » **Review of Downstream Conditions and Failure Consequence Classification**

All dam owners, except owners of exempt minor dams, are required on an annual basis to:

- review downstream conditions;
- re-assess the appropriateness of the dam’s failure consequence classification;
- if classification has changed, notify a provincial Dam Safety Officer (DSO) for acceptance of any change in dam classification; and
- meet the safety requirements associated with their existing or new classification.

### » **Emergency Contact for Low Consequence Classification Dams**

Owners of low consequence classification dams that meet the criteria specified in Part 3 of the DSR, must submit to a DSO and any local emergency authority, the name and contact information of the emergency contact for the dam.

### » **Dam Emergency Plan Replaces Emergency Preparedness Plan**

Dam owners must prepare one written plan containing two parts: the first describing the actions the dam owner must take in case of an emergency at the dam and the second containing key information about the dam and emergency contacts to be provided to local emergency authorities for preparing local emergency plans.

» **Owner's Designate**

When there are two or more owners of one dam the owners must, on request of DSO, designate one of the owners for the purpose of being the main contact with the DSO.

» **Hazardous Conditions at a Dam**

Dam owners are required to promptly inform the DSO of the nature of hazardous conditions at the dam and submit a report to the DSO on actions taken no later than 30 days after the hazardous conditions have been rectified.

» **Potential Safety Hazard at a Dam**

Dam owners who become aware of a potential safety hazard at their dam must prepare a plan that sets out any actions required to rectify the potential safety hazard, submit the plan to the DSO for acceptance and, if accepted, implement the plan.

### ***Dam Safety Program and Officers***

The Provincial Dam Safety Program provides design, construction, operation, surveillance, maintenance, and/or decommissioning guidelines, and assists dam owners in meeting these guidelines and the regulation. Training for dam owners on inspection and maintenance of dams is available. Please contact your DSO or the program as provided below.

Dam Safety Officers (DSOs), located in each region and in Victoria, help protect public safety by auditing and monitoring the activities of dam owners and taking enforcement/compliance action when necessary.

### ***For more information:***

For more on the B.C. Dam Safety Program and the Dam Safety Regulation (DSR) visit [www.gov.bc.ca/water](http://www.gov.bc.ca/water).

For enquiries requiring assistance, contact:

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