

The Seventh Anniversary of the 2013 Flood

Update and Supplemental Information on The Springbank Dry Reservoir

The expert panel that was formed by the government of more than 50 members has estimated the volume of the 2013 flood as 100M m³, and since the SR1 is classified as an “extreme” consequence dam, basic engineering design requires adding a margin of safety with an order of magnitude 25% – 50% larger than 100M m³.

In other words, the storage design capacity of the SR1 should range from 125M m³ to 150M m³.

However, the flood storage capacity of the SR1 was designed as low as 70,200,000 m³ to 77,771,000 m³.

The recent installation of higher steel gates to the Glenmore dam could, on one hand, affect the dam’s safety, and, on the other hand, only 10.00 m³ extra capacity is added, i.e., the estimated total available capacity would be: 80,200,000 m³ to 87,771,000 m³, **(only 50%-60% of the required safe capacity)**.

Secondly, normal engineering practices requires that dams be designed to protect against “worst case scenario”, however, it has been reported in many official documents that the design of the SR1 is to protect against floods of similar size to 2013 or less.

Dams’ life time in Alberta has exceeded 50 years and Glenmore dam is reaching 100 years.

It is against simple commonsense and basic engineering practices to assume that during the 100 years period after building the SR1, our province wouldn’t experience a flood bigger than that of 2013.

Most scientists and experts predict next floods could be worse than previous ones.

The SR1 being classified as an “extreme” consequence dam, with a location only 15km. away from a major city (Calgary), in case of a breach or a total collapse, **the result would be a colossal damage to lives and properties.**

It is now more than five years since the SR1 was selected and a signed Initial Design Report (IDR) is still in draft. What could be the deterring technical problems?

There are other better options including the Micro-Watershed Impounding (MWI) and the Tri-river Joint Reservoir of Alberta: <http://preventingalbertafloods.ca>

Sincerely,

Flood & Water Management Council (FWMC)