

# Backgrounder:

## Highlights of the Special Dam Review



Saskatchewan  
Watershed  
Authority

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The four-part special review was announced August 2, 2011 in response to unprecedented runoff and rainfall levels this year. The overall conclusion of the Watershed Authority's review was that Saskatchewan's water management infrastructure performed extremely well under challenging circumstances in 2011. Highlights of the findings and the Province's response in each of the four areas are outlined below:

1. Undertake special inspections of dams that experienced unusually high flows or reservoir levels in 2011.

- **Key Finding:** Immediate repairs and maintenance needed as a result of the 2011 flood season are largely related to erosion at approach and outlet channels at the control structures of the Watershed Authority's dams. Dams where this damage was most significant are Katepwa, Moose Mountain, Theodore and Candle Lake. Seepage flows around the left abutment of Kingsway Dam also increased notably. It is unknown whether the high flows on the Moose Jaw River were responsible for this increase.
- **Primary Response:** The Government has provided the Watershed Authority with an additional \$1.9 million in immediate funding to address infrastructure repairs required due to the 2011 floods.

2. Use inspection findings and ongoing monitoring and assessments to identify long-term infrastructure renewal needs of the Saskatchewan Watershed Authority.

- **Key Finding:** Given the critical role of the Watershed Authority's dams in providing effective flood control and a source of reliable water, additional rehabilitation and upgrades are needed over the next decade to ensure that any long-term infrastructure issues are addressed in a timely and effective manner.
- **Primary Response:** Based upon previous internal and external assessments of the Watershed Authority's infrastructure, as well as the findings of this review, the Government has directed the Watershed Authority to develop a ten year infrastructure renewal plan that can be released publicly in 2012.
- **Other notable actions:** Commissioning additional external studies on Rafferty and Alameda dams.

3. Review and recommend upgrades to the Watershed Authority's Dam Safety Program.

- Key Finding: No substantive diminution in the safety of the Watershed Authority's dams occurred as a direct result of the flooding in 2011. However, upgrades are required to ensure Saskatchewan water management infrastructure remains safe and effective over the long-term.
- Primary Response: In addition to the development of the ten year plan, the Authority will accelerate and enhance the extensive dam safety programs already in place at the Watershed Authority.

4. Review and make recommendations at Gardiner, Rafferty, Alameda and Boundary Dams

- Key Finding/Recommendation: Given the multitude of stakeholders who benefit from, or are impacted by, the operations of these dams, establish an external, independent process for evaluating their operations.
- Primary Response on Gardiner Dam: Two respected hydrologists at the University of Saskatchewan, Dr. John Pomeroy and Dr. Kevin Shook, have been engaged to review operations at Lake Diefenbaker over the past year.
- Primary Response in the Souris Watershed: In cooperation with Manitoba and North Dakota, the Watershed Authority will request that a review of operations in the Souris Watershed (i.e. Rafferty, Alameda and Boundary Dams) be undertaken by the International Souris River Board under the auspices of the International Joint Commission. This International review will ensure that the 2011 operations will be reviewed in an effective and comprehensive manner.