

## Chapter 49

# Water Security Agency – Identifying Risks to the Water Supply

### 1.0 MAIN POINTS

Effective October 1, 2012, Saskatchewan Watershed Authority became the Water Security Agency (Agency).

The Agency has addressed four of the six recommendations that we made in our 2010 audit of the Agency's processes to identify risks to the water supply. The Agency still needs to consistently document causes of risks to the water supply and communicate the likelihood and impact of key risks to the public.

### 2.0 INTRODUCTION

The Agency supports the protection of drinking water, flood and drought response, and management of water supplies, water quality, and aquatic habitat. The Agency also owns and operates provincial dams and water supply channels.

In Chapter 19 of our *2010 Report – Volume 2*, we reported on Saskatchewan Watershed Authority's processes to identify risks to the water supply and made six recommendations for the Authority to improve its processes.

This is our first follow-up to the 2010 audit. At September 30, 2013, the Agency has addressed four of our six recommendations.

To conduct this review, we followed the standards for assurance engagements published in the *CPA Canada Handbook - Assurance*. To evaluate the Agency's progress towards meeting our recommendations, we used the relevant criteria from the original audit. The Agency's management agreed with the criteria in the original audit.

### 3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation, the Agency's actions up to September 30, 2013, and the status of recommendations (including the date on which the Standing Committee on Public Accounts agreed to the recommendation).



### 3.1 Policy Approved for Identifying Risks to the Water Supply

---

We recommended that the Water Security Agency's (formerly Saskatchewan Watershed Authority) Board approve a policy for identifying risks to the water supply. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Implemented

The Agency approved a Strategic Risk Management Process Policy on March 13, 2012. The policy outlines a formalized strategic risk management process that will support all levels of decision making. Under the policy, the Agency plans to undertake strategic risk management on an annual basis. This is expected to include identifying major risks to the water supply.

### 3.2 Plan in Place for Identifying Risks to the Water Supply

---

We recommended that the Water Security Agency (formerly Saskatchewan Watershed Authority) implement a written plan for identifying risks to the water supply. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Implemented

In October 2012, the Agency released the *25 Year Saskatchewan Water Security Plan* (Plan). The Plan outlines seven goals to help ensure the sustainability and quality of Saskatchewan's surface and groundwater supplies. The Agency leads the implementation of the Plan.

The Plan outlines action items to be undertaken to achieve the overall goals. For example, the Plan notes that a Boreal Watershed Initiative will be completed by 2016. The Boreal Watershed Initiative is expected to identify risks and thresholds to protect northern waters, which are being impacted by industrial emission pollutants such as nitrogen dioxide and sulphur dioxide that are transported to water bodies through the air (i.e., falling precipitation).

The Agency plans to renew the Plan every five years.

### 3.3 Processes Documented for Collecting Information about Water Supply

We recommended that the Water Security Agency (formerly Saskatchewan Watershed Authority) document its processes to collect information about the water supply. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Implemented

The Agency has developed procedures to monitor the quantity and quality of surface and groundwater. The procedures outline the methodology and sampling frequency for both water quantity and water quality monitoring.

The Agency collects water quantity information from 283 stations across the province, some of which are owned and operated by Environment Canada. Data from this network of stations is used for watershed planning, flood forecasting, ensuring interprovincial obligations are honoured, and identifying and mitigating risks to water management infrastructure. The Agency also monitors groundwater levels through 70 wells in the province.

The Agency now directly monitors water quality at 23 sites in the province that were previously monitored by the Ministry of Environment. Monitoring of water quality also occurs at Rafferty and Alameda Reservoirs, Lake Diefenbaker, and four Qu'Appelle Lakes. Samples from the monitoring sites are assessed for various components of water quality including nutrients, biology, general chemistry, heavy metals, and pesticides. Monitoring samples helps to determine the health status of the ecosystem and inform decision making.

### 3.4 Information Evaluated About Water Supply

We recommended that the Water Security Agency (formerly Saskatchewan Watershed Authority) systematically evaluate information about the water supply to identify risks. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Implemented

The Agency is incorporating risk assessments into water supply evaluations and decision making. For example, an operating plan for Lake Diefenbaker is being prepared by the Agency and is scheduled for completion in 2014. Lake Diefenbaker is a critical water resource that provides multiple services (e.g., drinking water, water for agriculture, and recreational opportunities) for the province. The Agency is using a stakeholder engagement process along with technical sampling data to develop formal rules and operating procedures for Gardiner Dam at Lake Diefenbaker.



In addition, through local watershed advisory committees and technical committee members (including staff from the Agency), 12 watersheds have developed watershed plans. For example, the plan for the Lower Qu'Appelle watershed, which was released in July 2013, was developed based on the analysis of water supply information and risks. The watershed plan outlines strategies for addressing those risks.

### 3.5 Need to Document Identified Causes of Risks

---

We recommended that the Water Security Agency (formerly Saskatchewan Watershed Authority) consistently document identified causes of risks to the water supply. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Partially Implemented

The Agency continues to work on identifying the specific causes of risks to the water supply and documenting action plans to mitigate the causes.

### 3.6 Need to Improve Communication About Risks to the Water Supply to the Public

---

We recommended that the Water Security Agency (formerly Saskatchewan Watershed Authority) communicate to the public risks to the water supply including likelihood and impact of these risks. (2010 Report – Volume 2; Public Accounts Committee agreement January 20, 2011)

**Status** – Partially Implemented

The Agency informs the public about the state of Saskatchewan watersheds through its *State of the Watershed Report*. This report is published every five years and was last published in 2010. The report provides trends on the health of watersheds and the stressors that are negatively impacting them. The report includes limited management activities that are being adopted to mitigate the stress and improve the health of the watersheds. The results in the report do not allow conclusions to be made about cause-and-effect relationships on the stressors identified. As the Agency begins to identify causes of risks to water supply (as noted in **Section 3.5**), it should begin documenting these causes and action plans to address them in future *State of the Watershed Reports*.

A *State of Drinking Water Quality Report* has also been published annually for the past 10 years, previously by the Ministry of Environment, and now by the Agency. The report outlines the activities undertaken for drinking water management and source water protection.

The Agency also plans to publicly report on the implementation of the *25 Year Saskatchewan Water Security Plan*.