

Chapter 32

Agriculture – Irrigation Infrastructure Maintenance

1.0 MAIN POINTS

By September 23, 2016, the Ministry of Agriculture (Ministry) had implemented the two remaining recommendations that we first made in our 2011 audit of its processes to maintain irrigation infrastructure at Lake Diefenbaker.

The Ministry developed long-term irrigation objectives. It is using these long-term objectives in developing long-term maintenance plans. Also, senior management reviewed written reports summarizing completed maintenance activities.

2.0 INTRODUCTION

The mandate of the Ministry is to foster a commercially viable, self-sufficient, and sustainable agriculture and food sector.¹ In some parts of Saskatchewan, this involves irrigation.

The Irrigation Act, 1996, gives the Ministry authority to own irrigation infrastructure and/or grant financial assistance related to irrigation. In 2015-16, the Ministry had irrigation infrastructure with a recorded cost of about \$62 million and a net book value of about \$8.2 million.²

On February 10, 2014, the Ministry transferred operations, including maintenance activities, of this irrigation infrastructure to the applicable irrigation districts. Although it transferred operations, the Ministry remains responsible for the irrigation infrastructure and its maintenance.

Our *2011 Report – Volume 2*, Chapter 3, included five recommendations we made as a result of our audit of the Ministry's processes to maintain irrigation infrastructure at Lake Diefenbaker. By February 2014,³ we reported the Ministry had implemented three of the five recommendations.

To conduct this review engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance*. To evaluate the Ministry's progress towards meeting our recommendations, we used the relevant criteria from the original audit. The Ministry agreed with the criteria in the original audit. To carry out this engagement, we discussed the actions taken by the Ministry to implement our recommendations, and reviewed related documentation (e.g., Saskatchewan Irrigation Strategy, maintenance work plan).

¹ Ministry of Agriculture, *2015-16 Annual Report*, p. 5.

² Ministry of Agriculture Capital Asset Continuity Schedule as of March 31, 2016.

³ February 2014 was the time of our last follow-up.



3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendations, the status of the recommendations at September 23, 2016, and the Ministry's actions up to that date.

3.1 Long-Term Irrigation Objectives Developed

We recommended that the Ministry of Agriculture set long-term irrigation objectives and use them to guide maintenance plans and priorities for its irrigation infrastructure. (2011 Report – Volume 2; Public Accounts Committee agreement April 10, 2013)

Status – Implemented

By September 2016, the Ministry had developed a Provincial Irrigation Strategy (Strategy). This Strategy is a part of the *25 Year Saskatchewan Water Security Plan*.

The four main objectives of this Strategy are enhanced returns from existing irrigation, irrigation expansion, irrigation sustainability, and long-term growth. The Strategy includes measurable outcomes for each of the objectives. For example, one of the outcomes for the irrigation expansion objective is, by 2020, to increase irrigated acres by 23,000 acres. The Ministry's infrastructure at Lake Diefenbaker will provide service to some of these acres. The Ministry will need to plan to sufficiently maintain its infrastructure over the long term to be able to provide service to these additional acres.

The Ministry has entered data on all of its irrigation assets at Lake Diefenbaker (excluding pump stations which are tracked separately) into its asset management software (SIIMS). SIIMS tracks information on asset condition (by component), consequence of failure (e.g., cost to repair, number of irrigation structures without water, safety), frequency of failure (remaining life of asset), location, size, replacement cost, and other inspection observations. This data is used to prioritize maintenance.

We observed that the Ministry is analyzing different scenarios using this asset data to finalize a long-term maintenance plan for its irrigation assets. These scenarios consider the established service objectives (e.g., additional serviced acres). This plan will estimate rehabilitation and replacement requirements, including costs, over the long term. The Ministry anticipates having its long-term maintenance plan for irrigation assets finalized by spring of 2017. Also, the Ministry uses the data in SIIMS (e.g., frequency and consequence of failure) and results of maintenance activities from the previous irrigation season to create annual maintenance plans.

3.2 Performance Monitoring Adequate

We recommended that the Ministry of Agriculture require and review regular written reports on the results of its maintenance activities for irrigation infrastructure for review by senior management. (2011 Report – Volume 2; Public Accounts Committee agreement April 10, 2013)

Status – Implemented

By September 2016, the Ministry completed an annual report for each of the irrigation districts at Lake Diefenbaker that summarized work completed throughout the fiscal year and future maintenance and operation items planned. Service reports from completed maintenance activities were included in the annual reports. These service reports were a detailed record of maintenance activities. The Executive Director responsible for Crops and Irrigation reviewed these annual reports.

