

# Environment and Parks

## SUMMARY

### DEPARTMENT

The Department of Environment and Parks should improve its asset management monitoring and recording processes for dam and water management structures—see below.

### ALBERTA ENVIRONMENTAL MONITORING, EVALUATION AND REPORTING AGENCY

There are no new recommendations to AEMERA in this report.

### NATURAL RESOURCES CONSERVATION BOARD

There are no new recommendations to the NRCB in this report.

## FINDINGS AND RECOMMENDATIONS

### DEPARTMENT

#### Matters from the current audit

#### Improve asset management monitoring and recording processes for dam and water management structures

##### BACKGROUND

The Department of Environment and Parks has a large, diverse and complex asset base of dam and water management structures. There are, among others, two important reasons for recording and monitoring these assets. First, the assets represent significant economic resources and the department needs to know how much its assets are worth. The history and value of each asset is tracked in an asset management accounting system used government-wide. Second, the department needs to know the assets' condition and replacement cost. These estimates for replacing the dam and water management structures are recorded in the Environment Infrastructure Management System (EIMS), which is used by the department's engineers who inspect the dams and water management structures. The replacement cost is the amount estimated to completely replace the dam and water management structure to bring it up to a brand new state. More importantly, EIMS tracks the condition of the dam and water management structures and is one source of information to help the department's management assess the book value of each asset. In other words, EIMS tracks indicators that a dam or water management structure has significantly deteriorated, in which case the asset's value may need to be reduced (written down) in the financial records.

Several factors make recording and monitoring the assets complex:

- There may be more than one way to count assets that are themselves made up of component parts: the components could be counted as separate assets or grouped together into one big asset.
- The department needs to estimate how its assets decline in value over time as they are used. For example, a dam that is 20 years old will likely be worth less than a newly built dam, but by how much? This process of decreasing the asset's value as it is being used is called "amortization."

Considerable judgment is required to assess the amortization period—that is, the period after which the asset is considered to have no further value.

- There are conditions that cause the book value of an asset to be impaired. An asset that is impaired (because it is damaged, for example) should be written down in value if the impairment is expected to be permanent. The valuation and assessment of the impairment of dams and water management structures is complex, as it includes engineering assessments of the conditions of the assets and their components.

#### RECOMMENDATION 17: IMPROVE CAPITAL ASSET MONITORING AND RECORDING PROCESSES

We recommend that the Department of Environment and Parks improve its processes for monitoring and recording dam and water management structure assets by:

- reconciling the Environment Infrastructure Management System with the asset management accounting system so that the assets listed in one reasonably correspond to those in the other
- completing a comprehensive analysis of assets to verify existence, completeness and valuation in order to maintain reliable accounting records
- applying criteria to decide when to write down an asset, and documenting the assessment of such decisions

#### CRITERIA: THE STANDARDS FOR OUR AUDIT

The department should have an effective process to identify and appropriately account for the assets recorded in its financial statements. These processes include:

- procedures to ensure that the assets exist and are recorded at the correct values, and to ensure asset lists are complete
- reconciliations of records between the two asset systems to ensure information used by management is reliable
- reviews to assess for impairments, write-downs and sequential betterments
- maintenance of appropriate documentation to confirm proper recording of the asset balances listed

#### OUR AUDIT FINDINGS

##### KEY FINDINGS

The department's processes to reliably assess the value of its dam and water management structure assets are insufficient. In particular, the department was not able to:

- compare and align the two systems used for tracking these assets—the Environment Infrastructure Management System and the asset management accounting system
- provide definitive evidence that assets are counted once and only once, and that assets are being amortized based on their appropriate life cycles
- show evidence of a robust asset impairment testing policy

#### Reconciliation of records between the two systems

The asset management accounting system groups together some assets that the Environment Infrastructure Management System treats as separate. Therefore, the number of assets listed in the asset management system is less than the number listed in EIMS. Further, the asset management system has a less detailed breakdown of the assets than EIMS. Management stated that the two systems were not designed for the same purpose. We agree that there are business reasons for operating two systems. However, management could not present reasons for permitting inconsistencies in the asset groupings used for the two systems. Regardless of business needs, the two systems should be reconciled either by asset level or by grouping.

The Water Projects Management division attempted a few years ago to compare and align the two systems and found that numerous assets from EIMS were not identified in the accounting system (a prior system that was similar to the present asset management system). The department did not continue the investigation, so resolution of the differences remains incomplete. Management stated that dedicated resources were not available to finish comparing and aligning the two systems. The existence of differences increases the risk of misstatements occurring in the values reported for assets.

### **Management's processes to confirm the existence, completeness and proper valuation of assets**

The department uses the asset management system to track and record assets for financial reporting purposes. Because this system has assets grouped with less detail than EIMS, the department was unable to confirm that its asset records are reliable. In particular, the department could not assert that assets are counted only once, and it could not assert that every asset is counted. In addition, management was unable to provide evidence of the various components that make up a grouped asset. Given the relative shortage of information in the asset management system, there is a risk that the assets listed there could include assets that are no longer in service.

The department's management informed us that there are practical constraints in gathering information for assets purchased over many years, including the lack of complete records because of the impact of several government reorganizations. Management explained that historical asset information might not be readily available as it resides in many locations and previous systems, or it may have been destroyed because of record retention requirements. Nevertheless, the department should implement steps to improve the overall reliability of its asset records.

The department currently amortizes the dam and water management structures over 20 to 80 years but has retained no evidence or documentation to confirm that the selected lifespans are appropriate. The department amortizes grouped assets using a single useful life. In practice, grouped assets are evaluated by the department's engineers component by component. These components have different useful lives from the core asset. The department has not evaluated whether it is appropriate to amortize the component assets over the same term as the core asset.

### **Assessing asset values for impairments and betterments**

The government's corporate accounting policy has requirements on how impaired assets are to be reported. If the impairment is expected to be permanent, its value should be written down—that is, the decrease in value should be accounted for. For assets that instead have only temporary impairments, the costs of repairing and maintaining them should be recorded as operating costs. The department has not established criteria or developed its own policy for deciding when to write down impaired assets. We saw no evidence of impairment testing against either pre-established criteria or an impairment policy.

We found that the department is not completely accounting for the costs of betterments. Betterments represent improvements that enhance the service potential of an asset. When an asset is improved, the department is appropriately adding the cost of betterment to the value of the asset. However, because the book value of the replaced component is not removed from the asset records, the value of the department's assets is likely overstated.

## **IMPLICATIONS AND RISKS IF RECOMMENDATION NOT IMPLEMENTED**

Without effective monitoring and recording processes, the department cannot accurately report the book value of assets in its financial statements. If the department does not make the improvements we

recommend, there will continue to be an increased risk that the financial statements will have material misstatements in relation to capital assets.

## OUTSTANDING RECOMMENDATIONS

### DEPARTMENT

The following recommendations are outstanding and not yet ready for follow-up audits:

**Sand and gravel: Flat fee security deposit—October 2008, no. 41, p. 362**

We recommend that the Department of Environment and Parks assess the sufficiency of security deposits collected under agreements to complete reclamation requirements.

**Climate change: Public reporting—October 2012, no. 10, p. 38  
(originally October 2008, no. 11, p. 101)**

We again recommend that the Ministry of Environment and Parks improve the reliability, comparability and relevance of its public reporting on Alberta's results and costs incurred in meeting climate change targets.

**Climate change: Improve planning—July 2014, no. 2, p. 41  
(originally October 2008, no. 9, p. 97)**

We again recommend that the Department of Environment and Parks improve Alberta's response to climate change by:

- establishing overall criteria for selecting climate change actions
- creating and maintaining a master implementation plan for the actions necessary to meet the emissions intensity target for 2020 and the emissions-reduction target for 2050
- corroborating—through modelling or other analysis—that the actions chosen by the ministry result in Alberta being on track for achieving its targets for 2020 and 2050

**Climate change: Improve monitoring processes—July 2014, no. 3, p. 44  
(originally October 2008, no. 10, p. 100)**

We again recommend that for each major action in the 2008 Climate Change Strategy, the Department of Environment and Parks evaluate the action's effect in achieving Alberta's climate change goals.

**Sand and gravel: Enforcement of reclamation obligations—July 2014, no. 4, p. 51  
(originally October 2008, no. 40, p. 360)**

We again recommend that the Department of Environment and Parks improve processes for inspecting aggregate holdings on public land and enforcing land reclamation requirements.

**Sand and gravel: Quantity of aggregate removed—July 2014, no. 5, p. 52  
(originally October 2008, p. 364)**

We again recommend that the Department of Environment and Parks develop systems to verify quantities of aggregate reported as removed by industry from public lands so that all revenue due to the Crown can be assessed and recorded in the financial statements.

**Flood mitigation systems: Update flood hazard maps and mapping guidelines**

—March 2015, no. 10, p. 76

We recommend that the Department of Environment and Parks improve its processes to identify flood hazards by:

- mapping flood areas that are not currently mapped but are at risk of flooding communities
- updating and maintaining its flood hazard maps
- updating its flood hazard mapping guidelines

**Flood mitigation systems: Assess risk to support mitigation policies and spending**

—March 2015, no. 11, p. 78

We recommend that the Department of Environment and Parks conduct risk assessments to support flood mitigation decisions.

**Flood mitigation systems: Assess effects of flood mitigation actions—March 2015, no. 13, p. 82**

We recommend that the Department of Environment and Parks establish processes to assess what will be the cumulative effect of flood mitigation actions in communities when approving new projects and initiatives.

**Systems to regulate dam safety: Develop plan to regulate dams—March 2015, no. 14, p. 90**

We recommend that the Department of Environment and Parks develop a plan to regulate dams and report on the results of its regulatory activities.

**Systems to regulate dam safety: Improve dam regulatory activities—March 2015, no. 15, p. 92**

We recommend that the Department of Environment and Parks improve its dam regulatory activities by:

- maintaining a reliable registry of dams
- obtaining sufficient information to assess the risk and consequences of dam failure
- retaining evidence of regulatory activities performed
- following up to ensure that owners correct deficiencies or manage them until they are corrected

**Systems to manage grazing leases: Clarify objectives, benefits and relevant performance measures**

—July 2015, no. 1, p. 20

We recommend that the Department of Environment and Parks define and communicate the environmental, social and economic objectives it expects grazing leases should provide all Albertans as well as relevant performance measures to monitor and ensure those objectives are met.

**Systems to ensure sufficient financial security for land disturbances from mining: Improve program design—July 2015, no. 2, p. 29**

We recommend that the Department of Environment and Parks, as part of its regular review of the Mine Financial Security Program:

- analyze and conclude on whether changes to the asset calculation are necessary due to overestimation of asset values in the methodology
- demonstrate that it has appropriately analyzed and concluded on the potential impacts of inappropriately extended mine life in the calculation

**Systems to manage the SGE Regulation: Clarify SGE Regulation guidance documents**

—July 2015, no. 4, p. 43 (originally October 2009, no. 4, p. 46, repeated as November 2011, no. 1, p. 17)

We recommend for a third time that the Department of Environment and Parks clarify the guidance it provides to facilities, verifiers, offset project developers and offset protocol developers, to ensure they consistently follow its requirements to achieve the Alberta government's emission reduction targets.

**Systems to manage the SGE Regulation: Ensure offset protocols meet new standard and improve transparency—July 2015, no. 5, p. 46 (originally November 2011, no. 2, p 23)**

We again recommend that the Department of Environment and Parks implement processes to ensure that all approved protocols adhere to its protocol development standard.

**Managing Alberta’s Water Act Partnerships and Regulatory Activities: Monitor wetland restoration—October 2015, no. 6, p. 45 (originally April 2010, no. 6, p. 71)**

We again recommend that the Department of Environment and Parks formalize its wetland restoration relationships and control procedures.

**Financial reporting processes—October 2015, no. 11, p. 91**

We recommend that the Department of Environment and Parks improve its process for preparing timely and reliable financial statements by:

- improving the quality of documentation and analysis to support financial statement items and disclosures
- preparing reconciliations for key financial statement balances
- scheduling and evidencing management reviews of financial statements, analysis and supporting documentation before finalizing draft financial statements

**Improve capital asset monitoring and recording processes—October 2016, no. 17, p. 104**

We recommend that the Department of Environment and Parks improve its processes for monitoring and recording dam and water management structure assets by:

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Management has identified this recommendation as implemented – to be confirmed with a follow-up audit:

**Climate change: Outsourced service providers—October 2009, p. 49**

We recommend that the Department of Environment and Parks develop controls to gain assurance that data hosted or processed by third parties is complete, accurate and secure. We also recommend that the Department of Environment and Parks formalize its agreement with its service provider for the Alberta Emissions Offset Registry.

## DEPARTMENT AND MUNICIPAL AFFAIRS

The following recommendation is outstanding and not yet ready for a follow-up audit:

**Flood mitigation systems: Designate flood hazard areas and complete floodway development regulation—March 2015, no. 12, p. 80**

To minimize public safety risk and to avoid unnecessary expenditure of public money, we recommend that the:

- Department of Environment and Parks identify flood hazard areas for designation by the minister
- Department of Municipal Affairs:
  - establish processes for controlling, regulating or prohibiting future land use or development to control risk in designated flood hazard areas
  - put in place processes to enforce the regulatory requirements

## ALBERTA ENVIRONMENTAL MONITORING, EVALUATION AND REPORTING AGENCY

The following recommendations are outstanding and not yet ready for follow-up audits:

**Joint Canada–Alberta Plan for Oil Sands Monitoring: Ensure timely, accurate and transparent public reporting—October 2014, no. 1, p. 26**

We recommend that the Alberta Environmental Monitoring, Evaluation and Reporting Agency work with the Government of Canada to ensure that public reporting on the joint plan is timely, accurate and transparent.

**Joint Canada–Alberta Plan for Oil Sands Monitoring: Improve planning and monitoring—October 2014, no. 2, p. 29**

We recommend that the Alberta Environmental Monitoring, Evaluation and Reporting Agency:

- implement effective processes for monitoring project status
- develop and implement work plans, with roles and responsibilities and timelines and deliverables, for implementing all key commitments under the joint plan
- clarify what needs to be done to implement any joint plan projects and commitments remaining after March 2015

## NATURAL RESOURCES CONSERVATION BOARD

There are no outstanding recommendations to NRCB.

