



REGIONAL DISTRICT of Fraser-Fort George

BACKGROUNDER – SOLID WASTE ASSET MANAGEMENT

The provision of solid waste management services is one of a number of regional wide services provided by the Regional District to all of the electoral areas and member municipalities. The importance of this service cannot be understated, and it is imperative for the Regional District to have a financial plan, including a fulsome asset management assessment, to guide decisions regarding the financial state of solid waste services in the region.

Why Solid Waste Asset Management Planning (AMP)?

Implementing asset management practices in solid waste operations is critical to:

- ensure efficient waste disposal;
- minimize environmental impact;
- optimize financial planning; and,
- maintain reliable service levels

by proactively identifying and addressing potential issues with facilities and infrastructure, which will ultimately extend their lifespan and reduce unexpected disruptions.

What is the Objective of Asset Management Planning?

The objective of asset management planning is to deliver a technical and financial roadmap for managing the Regional District's solid waste facilities and assets and to provide the means for the Regional District to maximize value from its assets, at the lowest overall expense, while at the same time maintaining service levels for its residents.

Regional District of Fraser-Fort George's Asset Management (AM) Strategy

As part of the Regional District's Asset Management Strategy (2017), one of the policy considerations is to create service specific asset management plans. The procurement of a consultant to prepare a solid waste management plan will be a major step forward in meeting the goals of the AM strategy; information for grant opportunities; updated five-year financial plan and a more robust regional solid waste management plan.

- **Asset Inventory and Condition Assessment:**
 - Detailed list of all solid waste assets (equipment, bins, containers, facilities) with age, condition, and maintenance history
 - Landfill Cell airspace
 - Breakdown of critical components with potential failure points
 - Visual inspections and performance data analysis (e.g., equipment breakdowns, bin damage)
- **Performance Metrics and Trends:**
 - Waste generation per capita
 - Recycling and composting diversion rates
 - Landfill capacity utilization
 - Costs associated with regional wide waste disposal, composting and recycling
- **Maintenance and Repair Strategies:**
 - Current maintenance practices and budget allocation
 - Preventive maintenance schedule for equipment and assets
 - Repair and replacement policies for aging assets
 - Cost-benefit analysis of repair vs. replacement options
- **Capital Improvement Plan:**
 - Identified needs for infrastructure upgrades (new equipment, landfill improvements such as Cell 2 and commercial entrance)
 - Estimated project costs and funding sources
 - Phased implementation plan considering budget constraints
- **Sustainability Initiatives:** (in support of goals identified in the Regional Solid Waste Management Plan)
 - Strategies to increase diversion rates
 - Environmental impact analysis of waste management practices

The key reasons to implement asset management in solid waste:

- **Cost savings:**
 - By identifying maintenance needs early, preventing breakdowns, and optimizing asset utilization, asset management can significantly reduce operational costs associated with repairs and replacements.
- **Environmental protection:**
 - Proper asset management helps minimize waste generation by optimizing and extending the lifespan of the landfills, contributing to a smaller environmental footprint.
- **Improved service quality:**
 - Proactive maintenance ensures reliable waste disposal services, minimizing disruptions and complaints from residents.
- **Risk mitigation:**
 - By monitoring asset condition and identifying potential failures, asset management can proactively address risks related to equipment breakdowns, safety hazards, and environmental contamination.
- **Data-driven decision making:**
 - Asset management systems gather data on equipment performance, allowing for informed decisions regarding maintenance schedules, asset replacement, and resource allocation.
- **Compliance with regulations:**
 - Proper asset management practices can help ensure compliance with environmental regulations related to waste disposal and handling.

Engaging a consultant to undertake this work will help guide Administration and the Board in long term solid waste management planning including:

- Updating the 2021 Regional Solid Waste Management Financial Plan
- Updating the 2011 Integrated Landfill Management Plan
- Updating the 2015-2025 Regional Solid Waste Management Plan