

ASSET MANAGEMENT

Department	Finance	Policy No.	0340-21	
Section	General	Date Approved by Board	December 13, 2019	
Repeals		Board Resolution #	RD/19/12/18	

Amended	Воз	oard Resolution #	
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1. Purpose

- 1.1 The purpose of this Policy is to outline the fundamental asset management principles to be developed and implemented across the Peace River Regional District (PRRD) in development of its <u>Asset Management (AM) system</u>. It also outlines the PRRD Board's commitment to AM.
 - a) The Peace River Regional District (PRRD) provides a wide range of services to the community that require the ownership and responsible operation, <u>maintenance</u> and <u>rehabilitation</u> of physical assets including land, buildings, equipment, transportation, drainage, sewer and water <u>infrastructure</u>.
 - b) AM is an integrated approach, involving all PRRD departments, to delivering value to the community through the effective management of existing and new <u>infrastructure</u> assets. The intent is to maximize benefits, reduce risk and provide satisfactory <u>levels of service</u> to the community in a sustainable manner. Good asset management practices are fundamental to achieving sustainable and resilient communities.

2. Scope

2.1 The PRRD owns a wide range of asset types that deliver services to the people of the PRRD. Each year the PRRD may receive or construct new assets. In addition, the PRRD may rely on <u>natural assets</u> or other assets that it does not own, in order to deliver services. This Asset Management Policy applies to the assets owned by the PRRD. Where service provision is supported by other assets not owned by the PRRD, we will work collaboratively with those asset owners and promote the principles outlined in this Policy.



- 2.2 The PRRD recognizes the importance of <u>natural assets</u> and will include these in its inventories and asset management practices. Examples include water bodies, wetlands and wildlife corridors.
- 2.3 Table 1 summarizes the services that the PRRD provides, and gives examples of the asset groups and asset types owned by the PRRD that support the delivery of those services:

TABLE 1

Service provided to the community (not an exhaustive list)	Example of asset group (not an exhaustive list)	Examples of asset types (not an exhaustive list)
Potable water supply	Water <u>infrastructure</u>	Dikes and weirs, reservoirs, pipes, valves, <u>natural assets</u>
Wastewater collection and treatment	Sewer infrastructure	Pipes, lift stations, manholes, natural assets, treatment plants
Flood protection	Drainage infrastructure	Pipes, culverts, chambers, natural assets
Recreational parks	Parks infrastructure	Playfields, playgrounds, trails, natural assets, campgrounds
Community facilities Civic facilities	Buildings	Civic offices, public works yard, fire halls, recreational and cultural huildings
Emergency response	Vehicles	Fire trucks, heavy equipment, snow ploughs
Support for departments to serve the community	IT infrastructure	Hardware, SCADA, telemetry, communication equipment

3. Definitions

3.1 Asset: An item, thing or entity that has potential or actual value to an organization. The value can be tangible or intangible, and financial or non-financial. An organization may choose to manage its assets as a group, rather than individually, to accommodate its



- needs and achieve additional benefits. Such groupings of assets may be organized by asset type, asset system or asset portfolio. (Source: ISO 55000:2014).
- 3.2 Asset Management (AM) System (the management system for asset management): A set of interrelated and interacting elements of an organization, whose elements include the AM policy and AM objectives, and the processes needed to achieve those objectives. In this context, the elements of the AM system should be viewed as a set of tools, including policies, plans, business processes and information systems, which are integrated to ensure that the AM activities will be delivered. (Source: ISO 55000:2014).
- 3.3 Asset Management (AM) Policy: Articulates the intentions and direction of an organization as formally expressed by its top management. The principles by which the organization intends to apply AM to achieve its organizational objectives should be set out in an AM policy. (Source: ISO 55000:2014).
- 3.4 Asset Management (AM) Strategy (also referred to as a Strategic Asset Management Plan (SAMP)): Documentation that specifies: how organizational objectives are to be translated into AM objectives, the approach for developing AM plans; and the role of the AM system in supporting achievement of the AM objectives. The approach to implementing the principles from the AM policy should be documented in the AM strategy. An organization's AM strategy should be used to guide the setting of its AM objectives, and to describe the role of the AM system in meeting these objectives. This includes identifying the structures, roles and responsibilities necessary to establish the AM system and to operate it effectively. (Source: ISO 55000:2014).
- 3.5 *Infrastructure:* Refers to the physical <u>assets</u> developed and used by an organization to support its social, cultural and economic services.
- 3.6 Levels of Service: The parameters, or combination of parameters, that reflect the social, political, environmental and economic outcomes that the organization delivers. The parameters can include safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost and availability. (Source: ISO 55000:2014).
- 3.7 Maintenance: The process of preserving a condition or situation or the state of being preserved (Oxford Dictionary, 2018). Maintenance can be planned/scheduled or reactive.
- 3.8 *Natural Assets:* The stock of natural resources or ecosystems that is relied upon, managed, or could be managed by a regional PRRD, or other form of local government for the sustainable provision of one or more services.
- 3.9 *Rehabilitation:* Refers to works to rebuild or replace parts or components of an <u>asset</u> to restore it to the required functional condition and extend its life. This could also



- incorporate some modification. (Source: AM Body of Knowledge (AMBOK), AM Council of Australia, 2018).
- 3.10 Resilience: The capacity to recover quickly from difficulties (Oxford Dictionary, 2018). A resilient community has the capacity to survive and adapt to chronic stresses and acute shocks, like population growth or decline, aging populations, influxes of new immigrants, economic swings, or climate change impacts like severe storms, flooding or melting permafrost. It requires a holistic understanding of the systems within a community and their interdependencies and risks. Local governments can use asset management to become resilient by moving from a reactive approach that deals with stresses as they arise, to a more proactive one that anticipates and considers these stresses during planning. (Source: Building Sustainable and Resilient Communities with Asset Management, FCM 2018).
- 3.11 Strategic Asset Management Plan (SAMP): See definition for <u>Asset Management (AM)</u>
 <u>Strategy</u>.
- 3.12 Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own needs (Environment and Climate Change Canada). Achieving sustainability means making sure we are making the right decisions today that will have a positive effect in the long term. The three main pillars of Sustainable Development include economic growth, environmental protection, and socio-cultural equity. (Source: United Nations Brundtland Commission).
 - a) Alternative Definitions:
 - i. Sustainability: Based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations. (Source: US Environmental Protection Agency).
 - ii. Sustainable Development: Maintaining or improving the standard of living by protecting human health, conserving the environment, using resources efficiently and advancing long-term economic competitiveness. It requires the integration of environmental, economic and socio-cultural priorities into policies and programs and requires action at all levels citizens, industry, and governments. (Source: Environment and Climate Change Canada)
 - iii. Sustainability in the Context of Asset Management: Means that infrastructure assets shall be managed using a balanced approach to meet the long-term economic, social and cultural, physical and environmental needs of the community. (Source: City of Vancouver Engineering Department).



3.13 Whole-life Cost (WLC) (also sometimes referred to as Life Cycle Cost): The total cost of owning an asset over its entire life. Whole-life cost includes all costs such as design and building costs, operating costs, associated financing costs, depreciation, and disposal costs. Whole-life cost also takes certain costs that are usually overlooked into account, such as environmental impact and social costs.

4. Policy

The following statements of principle will define a high-level approach to AM and will directly influence staff decision-making throughout all levels of the PRRD.

4.1 Service Delivery to Customers

- a. The PRRD will clearly define level of service objectives that balance community expectations and regulatory requirements with risk, affordability and available resources, and will do the following:
 - i. Manage <u>assets</u> appropriately in order to efficiently and effectively deliver the defined levels of service.
 - ii. Monitor and periodically review level of service objectives to ensure that they meet or support community and the Board's expectations and other strategic objectives.
- b. The PRRD will ensure transparency and accountability to the community on service delivery. This will include regular communications to the Board to share information on service performance as well as technical information such as <u>asset</u> condition.
- c. The PRRD will comply with all relevant legislative, regulatory and statutory requirements.
- d. The PRRD will implement an <u>AM system</u> that incorporates risk-based and information-driven decision-making frameworks that appropriately consider the potential impacts of <u>asset</u> failure on ongoing service delivery.
- e. The PRRD will ensure that decisions regarding the need for new <u>assets</u> are made with appropriate due diligence; and that these needs are evaluated with a focus on service delivery to the community, and supported with a valid business case that articulates costs and benefits.
- f. The PRRD will prioritize and direct resources and expenditure in order to deliver <u>levels of service</u> and other community benefits at an acceptable level of risk.

4.2 Long-Term Sustainability and Resilience

a. The PRRD's <u>asset</u> management decision-making will consider the needs of both current and future generations and the potential challenges associated with



- changing community demographics and expectations related to service delivery, as well as potential modifications to legislative requirements.
- b. The PRRD's asset management decision-making will consider the potential effects of climate change and other environmental changes, and how the increased severity and frequency of climatic events may directly affect <u>levels of service</u>. Where appropriate, the PRRD will adopt a proactive approach to mitigating the potential impacts of climate change.
- c. The PRRD will consider socio-cultural, environmental and economic factors and implications when making and implementing asset management decisions.

4.3 Integrated Decision-Making

- a. To support <u>asset</u> management decision-making, the PRRD will take steps to connect the appropriate departments, functions and support activities in order to build effective working relationships and encourage information-sharing. These departments and functions include planning, engineering, operations, <u>maintenance</u>, finance and other strategic planning functions such as <u>sustainability</u>.
- b. Asset management decision-making will drive optimum value for the community by focusing on the "big picture". The PRRD will therefore ensure that decisions are made collaboratively and consider all life-cycle stages and the interrelationships between asset performance, operational performance and overall service performance. Decision-making will also recognize the interconnected nature of asset systems and how decisions about one set of assets may potentially interact with or affect assets controlled by other departments or functions.

4.4 Fiscal Responsibility and Asset Management Decision-Making

- a. The PRRD will develop and maintain appropriate plans for <u>infrastructure</u> renewal, for the purchase or construction of new infrastructure and for the decommissioning of redundant infrastructure. This includes:
 - i. Developing long-term projections of investment needs.
 - ii. Applying rigorous analysis, including consideration of risk, to identify shortterm investment needs.
 - iii. Implementing processes to ensure that proposed investment plans address needs efficiently and effectively.
 - iv. Implementing processes to address the operational budget implications of capital investments.



- v. Exploring efficiency opportunities where appropriate, including new technologies.
- vi. Analyzing investment plans and associated funding requirements and putting in place mechanisms to ensure long-term financial <u>sustainability</u>.
- b. The PRRD will evaluate relevant <u>asset</u> investment decisions based on consideration of the <u>whole-life cost</u>s associated with managing those assets through their entire life cycle.
- c. The PRRD will develop prioritized capital investment plans that reflect community and stakeholder expectations with regard to level of service and other strategic objectives. The PRRD will evaluate the magnitude, nature and overall balance of investment plans considering the aggregate value derived for the community, affordability, willingness to pay and intergenerational equity.

4.5 Innovation and Continual Improvement

- a. The PRRD views continual improvement as a key part of our <u>asset</u> management approach and will focus on driving innovation in the development of tools, techniques and solutions.
- b. The PRRD will monitor and periodically review the effectiveness of asset management processes and the wider <u>asset management system</u> in supporting the delivery of strategic objectives, and will make adjustments as required.
- c. The PRRD will assess the asset management competencies required to implement the <u>AM system</u> and provide the necessary support, education and training to AM staff.
- d. The PRRD will review the Asset Management Policy in conjunction with its review of the asset management strategy, every three to four years.

5. Responsibility

- 5.1 It is the responsibility of the *Board* to:
 - a) Approve <u>asset</u> management policy;
 - b) Articulate community values and define priorities;
 - c) Approve funding and resources to implement the <u>AM policy</u> and associated requirements; and
 - d) Approve asset funding through multi-year and long-range financial plans.
- 5.2. It is the responsibility of the *Chief Administrative Officer* (CAO) to lead the implementation of the AM policy across the PRRD.



- 5.3. It is the responsibility of the *Departmental Managers* to lead the adoption of the AM Policy within their departments and to allocate appropriate resources to its implementation and associated requirements.
- 5.4. It is the responsibility of *all staff involved in the application of <u>asset</u> management to observe the requirements of the <u>AM policy</u>.*

Affiliated			
Procedure			