



# Corporate Asset Management Strategy

**Front cover photos, top to bottom:**

Craigflower Pump Station

Royal Theatre

Engineering staff at Sooke fire station

Regional parks dock

© 2019, Capital Regional District. All Rights Reserved.

The preparation of this report was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.

This strategy represents current information as of the time of publication. The Capital Regional District will be periodically updating and revising this strategy to reflect changes in direction and other developments.

*Published February 2019*

**Asset Management Steering Group Members:**

- ▶ Signe BAGH
- ▶ Lorraine BREWSTER
- ▶ Karla CAMPBELL
- ▶ Shawn CARBY
- ▶ Nelson CHAN
- ▶ Annette CONSTABEL
- ▶ Christine CULHAM
- ▶ Sarah FORBES
- ▶ Liz FERRIS
- ▶ Sharon GRIGG
- ▶ David HENNIGAN
- ▶ Ian JESNEY
- ▶ Steve KNOKE
- ▶ Rianna LACHANCE
- ▶ Iain LAWRENCE
- ▶ Scott MASON
- ▶ Stephen MAY
- ▶ Matthew McCRANK
- ▶ Mike MACINTYRE
- ▶ Jan D Van NIEKERK
- ▶ Hilary PARRY
- ▶ Chris ROBINS
- ▶ Dan ROBSON
- ▶ Todd SHANNON
- ▶ Russ SMITH
- ▶ Rob STORIE
- ▶ Carlo VIJANDRE

# Table of Contents

## At a Glance • 2

### Context & Definition

#### Overview • 5

|   |   |
|---|---|
| Delivering efficient and effective services. .... | 5 |
| Cost recovery of services. ....                   | 6 |
| Current challenges with assets. ....              | 6 |

#### Asset Management Defined • 7

|                                      |    |
|--------------------------------------|----|
| An integrated approach. ....         | 7  |
| Evidence-based decision-making. .... | 8  |
| Life-cycle management. ....          | 8  |
| Continuous improvement. ....         | 10 |
| Benefits. ....                       | 10 |

### Approach

#### Asset Management Framework • 13

|   |    |
|---|----|
| Corporate Asset Management Policy. ....   | 13 |
| Corporate Asset Management Strategy. .... | 13 |
| Asset management practices. ....          | 14 |
| Sustainable service delivery plans. ....  | 14 |

#### Implementation & Measurement • 16

|   |    |
|---|----|
| Implementation: plan and do phases. ....          | 16 |
| Measuring performance: check and adjust phases. . | 18 |

## Taking Action

### Improvement Action Plan • 20

|                                    |    |
|------------------------------------|----|
| Service Delivery & Community. .... | 24 |
| Decision-Making. ....              | 26 |
| Sustainability. ....               | 28 |
| Risk & Resiliency. ....            | 32 |
| Financial Strategy. ....           | 36 |
| Transparency. ....                 | 38 |
| Continual Improvement. ....        | 40 |

### Appendix: Risk Assessment Table • 42

*Asset management is the pathway to sustainable, resilient and adaptive service delivery.*

# AT A GLANCE

This strategy outlines how the CRD will apply an integrated approach, evidence-based decision-making, life cycle management and continuous improvement to maintain the levels of service desired by residents of the capital region.

It establishes seven asset management principles, developed in alignment with industry practices and organizational values and priorities:



**1. Service Delivery & Community:**

The CRD will put community service delivery needs first and foremost.



**2. Decision-Making:**

The CRD will make well-informed and evidence-based decisions.



**3. Sustainability:**

The CRD will deliver services that are environmentally, socially and economically sustainable for current and future generations.



**4. Risk & Resiliency:**

The CRD will manage risk and build resilient infrastructure.



**5. Financial Strategy:**

The CRD will evaluate and include full life cycle costs in financial decisions.



**6. Transparency:**

The CRD will establish a systematic and integrated approach to asset management and require rigorous and transparent processes.



**7. Continual Improvement:**

The CRD will commit to continual improvement, encouraging innovation of asset management practices and service delivery.

# The CRD's service delivery system

**1,100 employees** managing the CRD's assets

**15 drinking water systems**  
treating & delivering 130M litres of water daily

**618 structures** including bridges, dams, docks and affordable housing covering over 92,000 square metres

**7 wastewater systems**  
processing 100M litres of wastewater daily

**130,000** average tons of municipal solid waste received at Hartland landfill annually

**3 regional trails**

**31 regional parks & reserves**

**750 kilometres** of pipe infrastructure



# Context & Definition



Swim lessons at SEAPARC

# OVERVIEW

This Corporate Asset Management Strategy outlines how the Capital Regional District (CRD) will achieve and maintain a level of service delivery that is sustainable, resilient and adaptive to changing needs and circumstances.

The CRD was incorporated in 1966 to provide regional decision-making on issues that transcend municipal boundaries and to enable more effective service delivery to residents of the capital region.

Today, the CRD delivers more than 200 services. To accomplish this, the CRD owns a vast amount of assets, both engineered, such as treatment plants, and natural, such as parks.

These assets are managed by a workforce of approximately 1,100 employees and a network of more than 1,700 registered volunteers.

This strategy describes how the CRD will use a consistent and systematic approach to support the long-term sustainability and efficiency of all these assets to maintain desired levels of service.

## Delivering efficient and effective services

The CRD is the regional government for 13 municipalities and three electoral areas on southern Vancouver Island and the nearby Gulf Islands, serving an estimated population of over 403,000 residents.

As a local government, the CRD develops partnerships to facilitate and deliver projects and services — regionally, sub-regionally and locally — that will ensure a sustainable, livable and vibrant capital region.

**The key objectives of this Corporate Asset Management Strategy are to:**

1. Establish asset management guidelines and targets to ensure all divisional activities are in alignment with organizational priorities.
2. Specify tasks in a detailed Improvement Action Plan to achieve the objectives of the Corporate Asset Management Policy and to improve the CRD’s asset management program.
3. Provide a baseline understanding of asset management practices.

*This strategy came together with input and collaboration from divisional experts across the CRD. It is based on industry best practices and governed by the CRD’s Corporate Asset Management Policy.*

At a **regional level**, the CRD provides governance and services, such as affordable housing, parks and solid waste management, to all 13 municipalities and electoral areas. The CRD serves local municipalities while municipalities serve the residents.

For example, the CRD manages Hartland Landfill & Recycling Facility, a multi-purpose facility that provides collection for recycling, household hazardous waste and salvageable items; yard and garden waste collection and processing; and controlled waste disposal and landfill service for commercial and residential customers across the region.

At a **sub-regional level**, the CRD provides a service partnership when two or more jurisdictions jointly decide to receive services. For example, the CRD operates and manages SEAPARC, a recreation centre that is funded by the Town of Sooke and the Juan de Fuca Electoral Area.

At a **local level**, the CRD serves as the local government for three electoral areas — Salt Spring Island, Southern Gulf Islands and Juan de Fuca — and provides services such as community planning and land use regulation only to those areas.

## Cost recovery of services

Each CRD service is established by bylaw or letters patent that set out cost recovery methods within each service area. Funds collected must only be used for a specific service and cannot be shared, per Part 11 of the *Local Government Act*.

The only exception is a temporary loan from one service's reserve fund to another service's reserve fund for a budgeted capital purpose, also called inter-fund borrowing.

## Current challenges with assets

The majority of the CRD's existing assets were constructed in an era when there was significant funding support from provincial and federal governments across Canada.

Today, assets in the region face the following issues:

- ▶ They are seeing increasing demand from growing communities in the region.
- ▶ They need to be upgraded to comply with evolving environmental and safety standards.
- ▶ They must be able to handle the frequent and severe weather-related events of climate change.
- ▶ Their operational greenhouse gas emissions must be reduced.

Additionally, these assets are approaching the end of their expected useful life, and renewal investment is required so they can continue to provide services to the region.

***Asset management is crucial to the CRD's vision of an effective, efficient and open organization where communities strive to achieve exemplary environmental stewardship; a dynamic, vibrant economy; and an inclusive, caring society.***



# ASSET MANAGEMENT DEFINED

Asset management involves the balancing of costs, opportunities and risks against the desired performance of the assets for the purpose of delivering services that are socially, culturally, environmentally and economically sustainable.

## An integrated approach

Asset management is a team effort involving cross-divisional communication to gather all relevant information to make well-informed decisions.

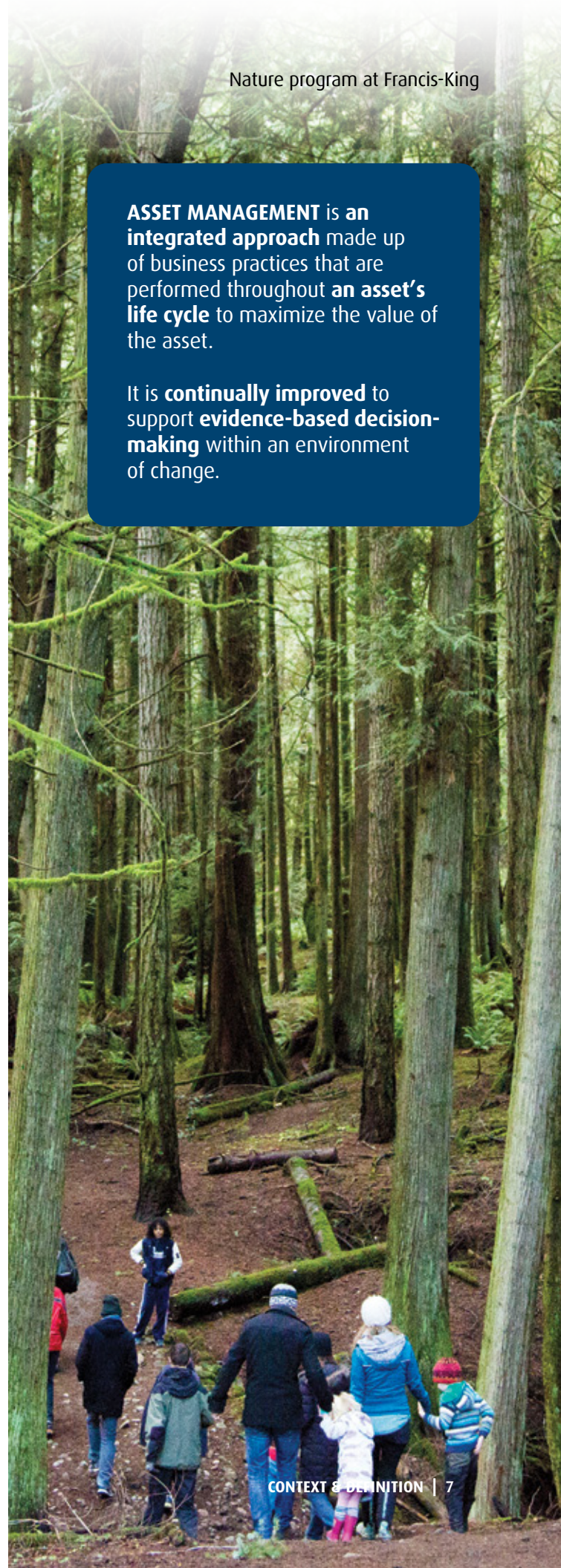
The CRD's Asset Management Division was formed to guide the development of asset management at the CRD by collaborating with divisions; by developing policy, strategies, frameworks, guidelines and procedures; and by serving in an advisory and mentoring role.

The key role of other divisions is to operationalize asset management practices by creating sustainable service delivery plans for the services they manage and then reporting out on progress.

A steering group that includes representation from every department within the CRD was created to develop this strategy as well as enable information-sharing throughout the organization and coordinate all asset management activities.

**ASSET MANAGEMENT** is an **integrated approach** made up of business practices that are performed throughout an **asset's life cycle** to maximize the value of the asset.

It is **continually improved** to support **evidence-based decision-making** within an environment of change.



## Evidence-based decision-making

The CRD is governed by a Board of 24 elected officials supported by over 70 committees and commissions. Its internal functions and external services are administered by staff in departments and divisions, volunteers, partnerships and contracted service arrangements.

The CRD works collaboratively with First Nations and other levels of government and also nurtures relationships with individuals, businesses, organizations, institutions and communities to deliver services to residents.

Within this environment, CRD decision-makers at all levels of the organization are constantly challenged to:

- ▶ find a balance between costs, risks and benefits
- ▶ meet the current needs of the region while trying to position the CRD to meet future needs
- ▶ consider climate change, growth forecasts, environmental management, socio-economic issues, affordability and changing risks as assets age
- ▶ maintain compliance with current and changing legislative requirements and industry standards
- ▶ provide consistent governance and decision-making across the organization

CRD decision-makers can more easily navigate these complex issues and structures when they have access to reliable and consistent information.

Asset management data and analysis will help them make well-informed, transparent and balanced decisions based on evidence that considers the purpose for the assets, the reason the assets exist and what the assets are required to do — all in the context of community needs and service performance objectives.

Having a consistent, systematic and standardized method of collecting, storing and analyzing information about assets will help CRD decision-makers determine which assets are in critical need of replacement, determine the capital reserve allocations for future replacement and demonstrate good stewardship of the services and assets that residents rely on every day.

## Life-cycle management

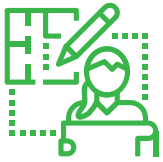
As a public sector organization, the CRD procures new assets with a focus on safety, security and sustainability and maintains current assets with a similar focus while also maximizing their useful life.

Decisions in one stage of an asset's life cycle can have significant impacts on the asset's performance in that stage and in subsequent stages. For example, a reduction in critical maintenance can shorten the lifespan of an asset, which results in needing to invest more in capital asset replacement programs.

Asset management considers these interrelationships and promotes a holistic way to achieve best performance against required outcomes.

# Asset Life Cycle

## Planning Stage



### determine asset requirements

- ▶ assessment of supply and demand, existing assets and their capabilities
- ▶ systematic analysis and review of strategic alignment
- ▶ review of long-term plans
- ▶ prioritization and development of a business case
- ▶ cost-risk-benefit analysis
- ▶ consideration of total life cycle costs

## Implementation Stage



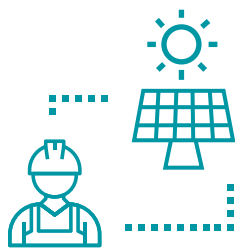
### build or acquire the asset

- ▶ pre-construction tasks, such as design and tender, procurement analysis and acquiring funding
- ▶ construction or acquisition
- ▶ project management
- ▶ post-construction tasks, such as commissioning and handing off to operations and maintenance staff and systems



## renew or dispose of asset

- ▶ replacement
- ▶ upgrading
- ▶ disposal



## Renewal or Disposal Stage

### deliver services with the asset

- ▶ general operations
- ▶ preventative and reactive maintenance
- ▶ routine and periodic inspections
- ▶ condition assessments
- ▶ compliance testing and monitoring
- ▶ performance measuring and reporting
- ▶ cost tracking



## Operations & Maintenance Stage

## Continuous improvement

Continuous improvement is an integral part of asset management as it allows improvement and adaptation of processes as needed, which builds organizational resilience.

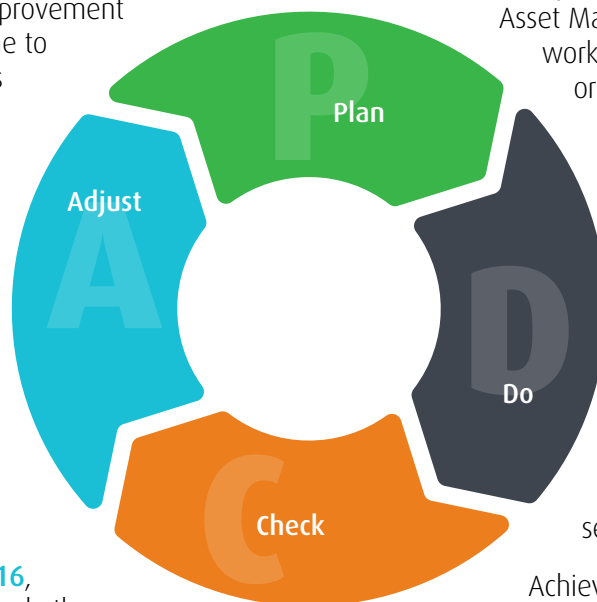
The continuous improvement process is a way to review the continued relevance of targets and actions and to identify a new set of actions for upcoming years.

The continuous improvement cycle the CRD applies to its asset management activities is an industry best practice.

It repeatedly cycles through the following stages:

- ▶ **Plan:** identify what improvement actions need to be done to achieve desired targets
- ▶ **Do:** implement the improvement actions
- ▶ **Check:** monitor and measure improvement progress and results
- ▶ **Adjust:** compare outcomes to objectives and determine if changes need to be made

See [Implementation & Measurement on page 16](#), to learn how the CRD will apply the continuous improvement cycle to its asset management activities.



## Benefits

Asset management provides multiple benefits, including:

- ▶ the ability to demonstrate accountability to stakeholders
- ▶ greater access to financial assistance, as some funding agencies give applicants higher priority ratings for having sustainable service delivery plans
- ▶ credible evaluation and communication of trade-offs between service, cost and risk
- ▶ a defensible way of prioritizing projects and resources

Additionally, implementation of the Corporate Asset Management Strategy will align work happening throughout the organization.

For example, the Regional Growth Strategy (RGS), a framework developed by municipalities and the CRD for identifying social, economic and environmental objectives and for guiding the direction of planning decisions, has a core objective to sustainably manage regional infrastructure services.

Achieving this and other RGS objectives will be critical to successfully sustaining the level of services that assets deliver today and for future generations. This Corporate Asset Management Strategy supports achievement of RGS actions, such as aligning with their long-term planning horizons.

This strategy also supports the other major strategies, plans and initiatives at the CRD. The benefits of this organizational integration will also be seen through the following:

- ▶ maximizing investments through managing risks and balancing costs
- ▶ ensuring fiscal management by knowing how much money needs to be saved for future infrastructure renewal
- ▶ achieving organizational strategic priorities and the service delivery mandate
- ▶ aligning with the long-term planning horizon of 20 years
- ▶ integrating a climate change lens in all relevant asset management decisions
- ▶ enhancing business continuity planning for essential service requirements
- ▶ ensuring that current and future demands are known and planned for in all relevant asset management decisions

*Sharing knowledge  
freely and openly will  
build a sustainable asset  
management culture within  
our community of practice.*

~CARLO VIJANDRE  
ASSET MANAGEMENT MANAGER





# Approach



# ASSET MANAGEMENT FRAMEWORK

The CRD's asset management framework ensures the organization will be **sustainable in service delivery**, will be **equipped to adapt to change** and will have the **tools to build resilience** into its infrastructure, natural assets and workforce.

The framework enables the organization to evolve its asset management practices and link them together, regardless of which division is implementing them. It also gives individual staff the confidence to make evidence-based decisions that are in alignment with organizational priorities and CRD policies while balancing cost, levels of service and risk.

## Corporate Asset Management Policy

The CRD's Corporate Asset Management Policy formalizes the corporate commitment to asset management and sets out specific roles and responsibilities for governance, management, implementation and participation in the various elements of the asset management program.

Guided by the CRD's organizational values, prioritization criteria, risk policy, accepted industry practices and other relevant corporate strategies, the Corporate Asset Management Policy establishes the CRD's seven asset management principles and the overarching objectives of the asset management program.

It also aligns the CRD's asset management approach with the region's needs and objectives, drives decision-making to be evidence based,

requires integration of asset management into all phases of an asset's life cycle and supports the CRD's approach to asset financing.

## Corporate Asset Management Strategy

The Corporate Asset Management Strategy ensures the CRD's Corporate Asset Management Policy will be implemented consistently across the organization while allowing flexibility and scalability within that implementation to accommodate differences in services.

It establishes 27 targets to ensure progress is made in achieving the seven principles defined by the Corporate Asset Management Policy and outlines tangible things the CRD will do to achieve those targets. This strategy also guides the development of sustainable service delivery plans, providing a clear line of sight between high-level objectives and the day-to-day activities carried out to deliver services and manage assets.

The Improvement Action Plan within the Corporate Asset Management Strategy will be updated annually to acknowledge completed actions and modify actions as needed to adapt to change in internal and external environments.

Residents using the  
Galloping Goose  
Regional Trail



## Asset management practices

Each division will implement asset management practices and tools – for example, data collection and monitoring – being mindful of continuous improvement to enhance and optimize decision-making capabilities throughout the life cycle of the assets.

## Sustainable service delivery plans

Each CRD service with an asset will have a sustainable service delivery plan. A corporate sustainable service delivery plan will aggregate these plans.

The plans will include performance measures with criteria such as condition and age profiles, level of risk exposure, total cost of service compared to income and reserves, technical measures for regulatory compliance, customer satisfaction indicators and other measures as appropriate.

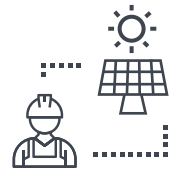
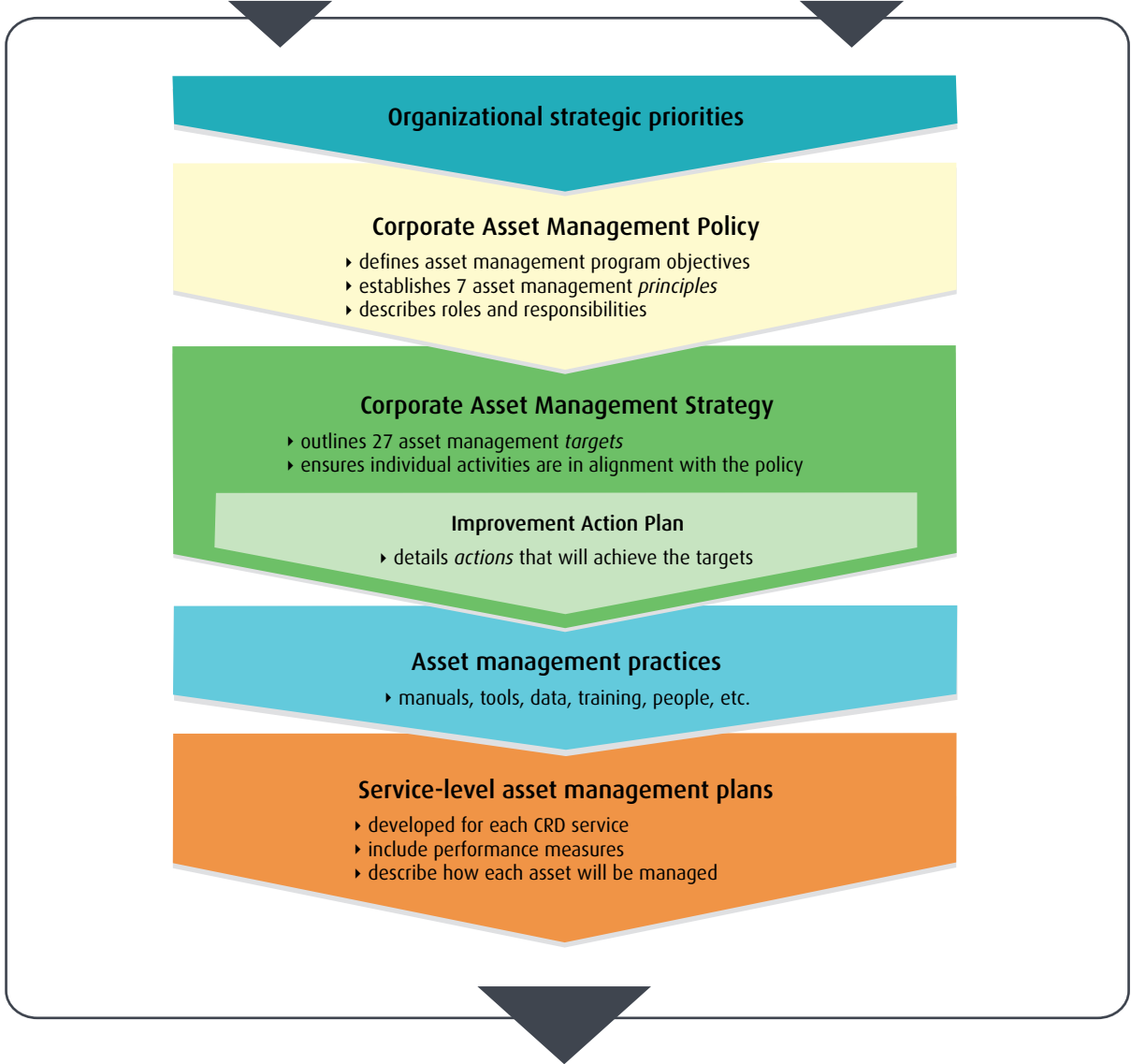
While this strategy outlines how the practice of asset management will be integrated into every element of CRD operations, the service-level plans will describe how each specific asset will be managed and will include detailed information about the asset, such as valuation, current condition, risks and long-term financial plans.

Each sustainable service delivery plan will be routinely reviewed to accommodate the changing needs of communities.



# CRD Asset Management Framework

## ORGANIZATIONAL VALUES & COMMUNITY NEEDS



# IMPLEMENTATION & MEASUREMENT

The CRD's methodology for implementing and measuring success on its corporate asset management framework is to follow the **continuous improvement cycle** of "Plan, Do, Check, Adjust."

## Implementation: plan and do phases

### **Plan: developing the corporate asset management program**

The CRD has completed the plan phase of its asset management program, and the outcome is this Corporate Asset Management Strategy, which outlines 27 targets to realize the seven asset management principles and also lists actions to achieve those targets.

The planning process was led by the Manager of Asset Management, with help from various subject matter experts. An asset management steering group, which included representatives from multiple CRD divisions, collaborated and held workshops to develop the corporate approach to asset management.

The plan phase also included a strategic risk assessment. Risk assessments are an important part of asset management, and for the purposes of this document, only risks relating to the CRD's ability to achieve asset management targets were defined. See the **Risk assessment table on page 42** for a list of potential risks and options for mitigation.

Risks associated with service delivery and individual assets will be defined through different avenues, such as the corporate risk register and site-specific risk assessments. These risks will be described in sustainable service delivery plans.

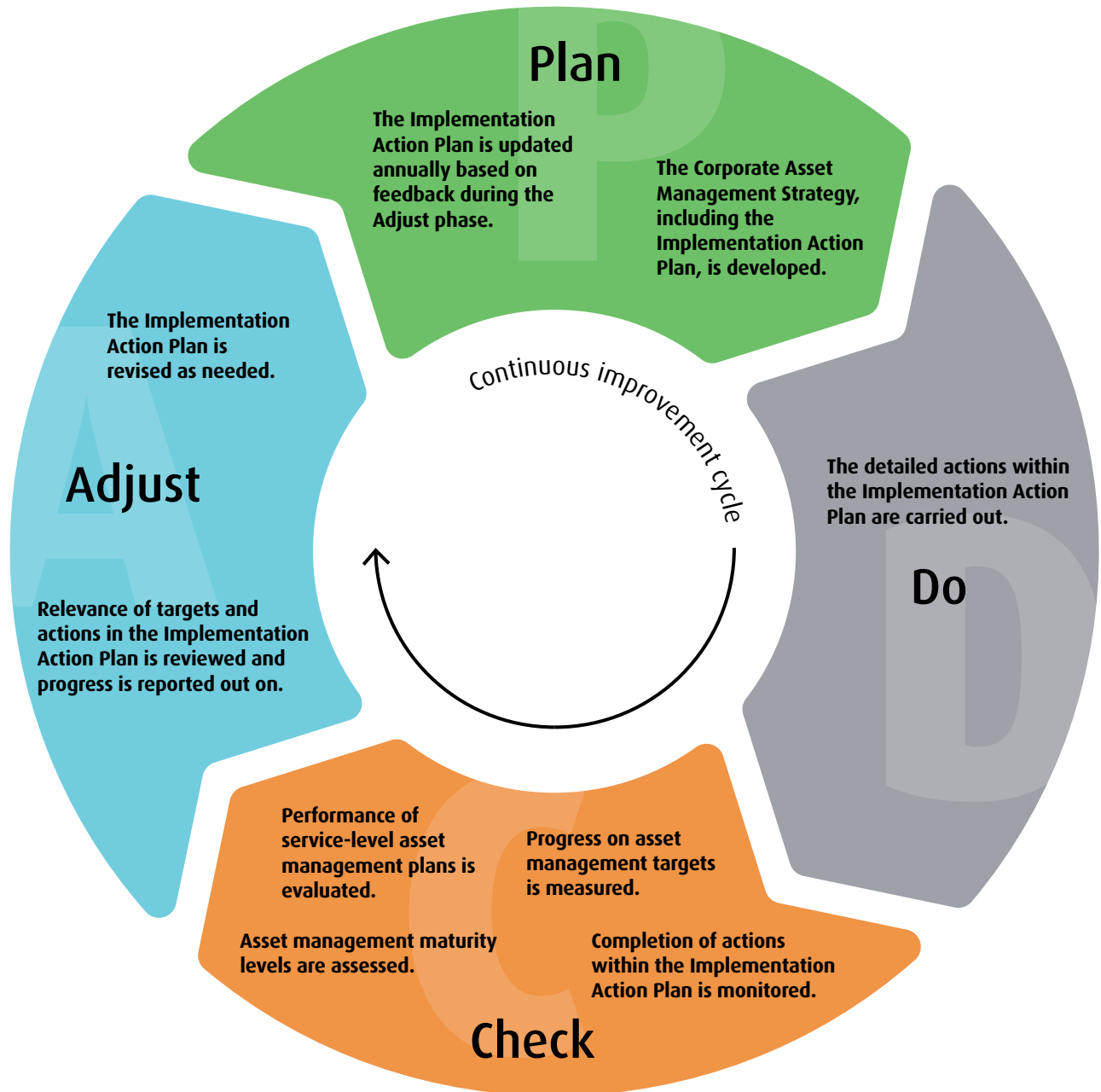
### **Do: implementing improvement tasks**

The **Improvement Action Plan on page 20** sets out tasks to be completed to improve asset management practices and service delivery across the CRD and achieve the asset management targets.

The responsibility for completing these tasks is shared across the organization. Progress on tasks will depend on availability of resources, commitment of senior management to assign staff and prioritize improvement work, and approval of funding for the support of external subject matter experts or additional resources as needed.

The divisions will determine the workforce needed to complete these actions, which may require new resourcing, depending on the results of the asset management maturity assessment and the capacity of their division.

## Implementation & Measurement of the CRD's Asset Management Program



## Measuring performance: check and adjust phases

The CRD will be monitoring and reporting out on the success of:

- ▶ the corporate asset management program
- ▶ the overall effectiveness of asset management
- ▶ the level of asset management maturity
- ▶ the success of service delivery

The Asset Management Division will prepare a report for the Board that includes progress in implementing improvement actions and achieving asset management performance measures, the status of asset management maturity, and recommendations for adjustments to the Improvement Action Plan.

### **Check: assessing progress**

Performance of the corporate asset management program will be assessed by measuring the rate of progress in completing tasks in the Improvement Action Plan. Completion of assigned actions on time and on budget will indicate that the program is successful with the provision of appropriate levels of funding and resourcing.

Ongoing monitoring of the Improvement Action Plan will occur throughout the year and be reported on annually. The responsibility for monitoring, measuring performance and reporting is a collaborative one, with inputs and actions from all divisions.

In addition to measuring whether individual actions have been completed or not, progress on the 27 targets will also be measured and reported out on as an indicator of the overall effectiveness of asset management.

Each division currently managing assets will complete an asset management maturity assessment that will help them understand where they are along the asset management journey. Individual divisional assessments will be collated by the Asset Management Division to establish a corporate result.

The level of asset management maturity achieved will be compared to previous benchmarked measures to report overall organizational improvement and capability. This performance measure is an indication of the level of knowledge and understanding that exists among CRD staff to do asset management as well as the level to which asset management practices have been implemented and embedded into routine business activities.

Service delivery performance will be monitored by each division based on the performance measures included in sustainable service delivery plans.

### **Adjust: revising the Improvement Action Plan**

The asset management maturity assessment process will help divisions with the annual process of considering asset management objectives and performance targets and of reviewing, resequencing and reprioritizing action items as relevant at a corporate level.

From this, the CRD will have the annual opportunity to review the continued relevance of the 27 targets and 73 actions in the Improvement Action Plan and update them accordingly.



# Taking Action

Capital Region Housing Corporation maintenance and property



# IMPROVEMENT ACTION PLAN

This section outlines the targets and actions that will ensure day-to-day activities are in alignment with the CRD's seven asset management principles:



**1. Service Delivery & Community:** The CRD will put community service delivery needs first and foremost.



**5. Financial Strategy:** The CRD will evaluate and include full life cycle costs in financial decisions.



**2. Decision-Making:** The CRD will make well-informed and evidence-based decisions.



**6. Transparency:** The CRD will establish a systematic and integrated approach to asset management and require rigorous and transparent processes.



**3. Sustainability:** The CRD will deliver services that are environmentally, socially and economically sustainable for current and future generations.



**7. Continual Improvement:** The CRD will commit to continual improvement, encouraging innovation of asset management practices and service delivery.



**4. Risk & Resiliency:** The CRD will manage risk and build resilient infrastructure.

Each of the seven sub-sections includes:

- ▶ The principle statement for the section.
- ▶ Discussion on the principle statement, what it means and why it's needed.
- ▶ A list of targets, which are numbered sequentially across all seven sections, that will demonstrate progress made toward achieving the principle.
- ▶ A list of improvement actions designed to achieve the stated targets. The actions are listed in tables that provide the following details:
  - ▶ a reference number linking tasks and sub-tasks to the seven principles
  - ▶ a brief description of the action
  - ▶ a timeline for completion: 1-2 years (short-term actions), 3-5 years (medium-term actions), 5-10 years (long-term actions) or ongoing (actions with no fixed end date)
  - ▶ a status column that indicates whether an action is completed, in progress or not started
  - ▶ a column that indicates which division(s) or stakeholder will be responsible for carrying out the action

The improvement actions requiring immediate attention have been highlighted as priority actions, and many of the actions listed in this plan already have been started or are well underway.

Implemented as part of this strategy, the improvement actions will:

- ▶ improve asset management practices and service delivery across the CRD
- ▶ evolve the CRD's asset management practices
- ▶ implement the requirements and commitments in the Corporate Asset Management Policy
- ▶ achieve tangible benefits that support delivery of CRD services and programs

## Status of Improvement Actions

as at December 2018

**4** completed

**31** in progress

**38** not started

*These are actions that were not a corporate-wide priority as at the time of publishing this strategy.*



Hartland landfill







CRD drinking water





## Service Delivery & Community

### The CRD will put community service delivery needs first and foremost.

Deciding whether a service is needed and then what the appropriate level of service should be requires balancing community needs, safety regulations, legal obligations, the demands of a changing climate, changes to demographics and population and the cost of service delivery.

Defining service levels ensures that stakeholder and community needs and expectations are fully understood and that the effectiveness of the service can be measured against those needs. With a clear understanding of the desired and required levels of service, the CRD will be better able to manage risk and save costs by planning proactively and will also be able to identify any surplus or under-performing assets.

The CRD believes it is important to communicate to the community the true cost of delivering their desired level of service and the different risks associated with these various levels. Consulting with community members on service priorities and expectations will also help direct the focus of asset management efforts.

In addition, developing relationships with other organizations will ensure asset management best practices and techniques are shared to spur innovation and continuous improvement.

#### Targets:

1. Levels of service that balance customer expectations and regulatory requirements with affordability, available resources and risk, and with climate, socio-cultural and environmental impacts
2. Levels of service that are sustainable because the following were considered in all asset and service delivery decisions:
  - ▶ current and long-term service delivery requirements
  - ▶ likely changes in demographics and population
  - ▶ community needs
  - ▶ legislative requirements
  - ▶ technological factors
  - ▶ adaptation to climate change
  - ▶ greenhouse gas reduction
  - ▶ socio-cultural, economic and environmental impacts
3. Strong, collaborative relationships with relevant organizations and stakeholders for sharing asset management knowledge



| Action  | Timeline    | Status        | Associated Division(s) and Key Stakeholders  |
|---|-------------|---------------|--|
| 1.1 Develop a corporate levels of service framework.  | ▸ 3-5 years | ▸ In progress | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Asset Management Steering Group</li> </ul> |
| 1.2 Define the level of service for every service in both customer need and technical output. | ▸ 3-5 years | ▸ In progress | ▸ All divisions*   |
| 1.3 Establish networks and relationships with relevant organizations and stakeholders.        | ▸ Ongoing   | ▸ In progress | ▸ All divisions  |

\* "All divisions" refers to divisions within the CRD that manage infrastructure assets.



## Decision-Making

### The CRD will make well-informed and evidence-based decisions.

The CRD delivers numerous services through the use of infrastructure assets, both engineered and natural.

Making the best decisions about these assets requires understanding the service need and evaluating all costs and benefits over the life of the asset. This can only happen when the CRD has appropriate, accurate, complete and credible information, together with an awareness of community priorities (see [Principle 1: Service Delivery & Community](#)).

When it has that information, the CRD is empowered to make well-informed decisions that promote financial stability and resilience and demonstrate good stewardship.

#### Targets:

4. The inclusion of relevant corporate perspectives, such as growth, sustainability and risk, and functional interdependencies, such as finance and land use, in asset and service delivery decisions
5. Informed decision-making that identifies full life cycle revenues and costs of assets, assesses options on a comparative basis, articulates and evaluates trade-offs and documents the basis for the decision



| Action   | Timeline    | Status        | Associated Division(s) and Key Stakeholders   |
|--|-------------|---------------|---|
| 2.1. Develop and Implement a multi-criteria analysis framework for prioritizing projects.  | ▸ 1-2 years | ▸ In progress | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Asset Management Steering Group</li> <li>▸ All divisions</li> </ul> |
| 2.2. Develop a business case framework, including implementation guide and templates, to support decision-making for major and minor capital projects. | ▸ 1-2 years | ▸ In progress | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Asset Management Steering Group</li> </ul>                          |
| 2.3. Establish a decision-making process for determining which projects should be submitted for grant applications.                                    | ▸ 1-2 years | ▸ Complete    | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> </ul>   |



## Targets:

6. Sustainable service delivery plans for each service that minimize life cycle costs while providing agreed levels of service, achieving public safety requirements, ensuring risks do not exceed acceptable levels, and considering social, cultural, environmental and economic sustainability
7. Periodic assessments of all assets regarding their use, function, and operating and maintenance costs to identify when assets are no longer necessary for the delivery of the agreed level of service
8. Procurement documents that include requirements to integrate relevant asset management practices during transitions from planning to implementation and from implementation to operation of assets
9. Asset and service delivery projects that are continually delivered according to current industry project management standards and best practices, including but not limited to project integration, scope, schedule, cost, communication, quality, human resources, procurement, risk and climate change lens
10. A corporate asset registry that has information on current engineered assets to support evidenced-based decisions
11. An enterprise asset management system that meets functional requirements and where asset data is optimized and maintained throughout the asset's life cycle
12. A corporate asset management program, including a steering group, policy and strategy, that supports the implementation of asset management practices across the CRD

## Sustainability

### The CRD will deliver services that are environmentally, socially and economically sustainable for current and future generations.

Asset management integrates business practices to help make forward-looking decisions that ensure the current and future demands of the community can be met.

These practices include: development and maintenance of a robust asset inventory; thorough knowledge of capacity and future demands; and established risk, procurement and project management processes.

The outputs from these processes and other considerations will be used to determine whether the total cost to manage assets and deliver services for the long term meets the three tiers of sustainability.



| Action  | Timeline    | Status        | Associated Division(s) and Key Stakeholders   |
|---|-------------|---------------|---|
| 3.1. Enhance and maintain condition data in asset inventory:  |             |               |   |
| a. Develop condition assessment program guidelines and framework, including framework for reporting assessment outcomes and trends.   | ▸ 3-5 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group  |
| b. Develop and implement 10-year prioritized condition assessment programs and procedures.  | ▸ 3-5 years | ▸ Not started | ▸ All divisions   |
| c. Annually report on asset condition outcomes and trends.  | ▸ 3-5 years | ▸ Not started | ▸ All divisions   |
| 3.2. Implement and integrate asset management practices into operations and maintenance business practices:   |             |               |   |
| a. Develop a register of maintenance activities to enable long-term maintenance planning.   | ▸ 1-2 years | ▸ Not started | ▸ All divisions   |
| b. Define and document existing operations and maintenance management strategies.   | ▸ 3-5 years | ▸ Not started | ▸ All divisions   |
| c. Develop and implement periodic assessment of use and function of all assets in relation to service delivery and optimization of service delivery costs and long-term sustainability. | ▸ 3-5 years | ▸ Not started | ▸ All divisions   |
| d. Identify legal obligations, standards, CRD Board targets and commitments related to assets at a divisional level.  | ▸ 3-5 years | ▸ Not started | ▸ All divisions   |
| e. Establish a corporate energy management process for buildings, facilities and infrastructure (see Corporate Climate Action Strategy for details).                                    | ▸ 3-5 years | ▸ In progress | ▸ Asset Management Division<br>▸ Risk & Insurance Division<br>▸ Facilities Management & Engineering Services Division   |
| 3.3. Develop and implement key sustainable service delivery planning documents to support sustainable service delivery, informed decision-making and effective risk management:         |             |               |   |
| <b>PRIORITY ACTION</b><br>a. Develop framework and templates for:<br>▸ sustainable service delivery plans<br>▸ corporate sustainable service delivery plan                              | ▸ 1-2 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group  |
| <b>PRIORITY ACTION</b><br>b. Integrate and implement the Corporate Asset Management Strategy into relevant service plans.   | ▸ 1-2 years | ▸ In progress | ▸ All divisions   |
| <b>PRIORITY ACTION</b><br>c. Develop sustainable service delivery plans for each service and maintain up to date.   | ▸ 1-2 years | ▸ In progress | ▸ All divisions   |
| d. Aggregate all sustainable service delivery plans into the corporate asset management plan.   | ▸ 3-5 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group  |
| e. Develop a corporate sustainable service delivery plan for the Salt Spring Island, Southern Gulf Islands and Juan De Fuca electoral areas.  | ▸ 3-5 years | ▸ In progress | ▸ Southern Gulf Islands Administration<br>▸ Salt Spring Island Administration<br>▸ Juan De Fuca Electoral Area Planning |

Action table continues on next page.



| Action  | Timeline  | Status   | Associated Division(s) and Key Stakeholders   |
|---|---|--|---|
| <p>3.4. Develop and implement key asset management reports and long- term financial plans to support sustainable service delivery, informed decision-making and effective risk management:</p> <p>a. Develop a Corporate Infrastructure Status Report template and distribute to divisions for completion.</p> <p>b. Gather standard analytic and insight reports for reporting at corporate, departmental and divisional levels, and for electoral areas.</p>  | <p>▶ 1-2 years</p> <p>▶ 3-5 years</p>                     | <p>▶ Not started</p> <p>▶ Not started</p>                      | <p>▶ Asset Management Division</p> <p>▶ Asset Management Steering Group</p> <p>▶ All divisions</p> <p>▶ Asset Management Division</p> <p>▶ Asset Management Steering Group</p>                              |
| <p>3.5. Integrate asset management practices into procurement procedures:</p> <p>a. Assess current procurement methods and how they could improve with asset management data and reports.</p> <p>b. Liaise with Corporate Services to update existing procurement documentation and scope of work definitions to embed asset management principles.</p> <p>c. Develop and embed standard asset management terms and requirements in operating agreements with third parties that operate and maintain CRD-owned assets.</p> | <p>▶ 1-2 years</p> <p>▶ 3-5 years</p> <p>▶ 5-10 years</p> | <p>▶ Not started</p> <p>▶ Not started</p> <p>▶ Not started</p> | <p>▶ Asset Management Division</p> <p>▶ Legal Services Division</p> <p>▶ Asset Management Division</p> <p>▶ Legal Services Division</p> <p>▶ Asset Management Division</p> <p>▶ Legal Services Division</p> |
| <p>3.6. Integrate industry project management standards and best practices into capital project delivery:</p> <p>a. Develop guidelines for project management standards and best practices to be used for capital projects.</p> <p>b. Develop guidelines for converting capital project costs to unit rates that can be used for capital budgeting and renewal forecasts.</p>   | <p>▶ 1-2 years</p> <p>▶ 1-2 years</p>                     | <p>▶ Not started</p> <p>▶ Not started</p>                      | <p>▶ Asset Management Division</p> <p>▶ Asset Management Steering Group</p> <p>▶ Corporate Asset Management Division</p> <p>▶ Asset Management Steering Group</p>   |
| <p>3.7. Enhance and maintain comprehensive asset inventory:</p> <p>a. Develop data governance document, including data model, data standards, definition of data roles and responsibilities, quality control and reporting framework.</p> <p>b. Develop and implement prioritized data capture programs and procedures.</p>   | <p>▶ 1-2 years</p> <p>▶ Ongoing</p>                       | <p>▶ Not started</p> <p>▶ Not started</p>                      | <p>▶ Asset Management Division</p> <p>▶ Information Technology &amp; GIS Division</p> <p>▶ All divisions</p>  |

**PRIORITY ACTION**





|                        | Action  | Timeline     | Status        | Associated Division(s) and Key Stakeholders                            |
|------------------------|---|--------------|---------------|--|
|                        | 3.8. Implement an enterprise asset management system:   |              |               |  |
| <b>PRIORITY ACTION</b> | a. Develop a corporate technology master plan (related to physical assets) and include an enterprise asset management technology road map and readiness assessment.   | ▸ 1-2 years  | ▸ In progress | ▸ Asset Management Division<br>▸ Information Technology & GIS Division |
| <b>PRIORITY ACTION</b> | b. Develop a functional requirements list for each division, covering asset management, service delivery and decision support needs in every phase of an asset's life cycle.  | ▸ 1-2 years  | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group       |
|                        | c. Evaluate the corporate IT systems against the asset management functional requirements list and report outcomes.   | ▸ 3-5 years  | ▸ In progress | ▸ Asset Management Division<br>▸ Information Technology & GIS Division |
|                        | d. Develop an enterprise asset management system, including: <ul style="list-style-type: none"> <li>▸ an operations and maintenance module</li> <li>▸ a capital project management module</li> <li>▸ a capital planning module</li> <li>▸ a training program</li> </ul> | ▸ 5-10 years | ▸ In progress | ▸ Asset Management Division<br>▸ Information Technology & GIS Division |
|                        | 3.9. Provide effective asset management guidance to enhance and maintain appropriate consistency of approach in implementing asset management practices:  |              |               |  |
| <b>PRIORITY ACTION</b> | a. Establish an asset management steering group, document terms of reference, and develop asset management roles & responsibilities structure.  | ▸ 1-2 years  | ▸ Complete    | ▸ Asset Management Division  |
| <b>PRIORITY ACTION</b> | b. Develop the asset management policy and strategy.  | ▸ 1-2 years  | ▸ Complete    | ▸ Asset Management Division<br>▸ Asset Management Steering Group       |
|                        | c. Liaise with Corporate Services to include relevant asset management principles and requirements when developing and updating service and requisition bylaws.   | ▸ Ongoing    | ▸ Not started | ▸ Asset Management Division<br>▸ Legal Services Division               |
|                        | d. Identify measurable indicators for assessing the sustainability of current service delivery. Develop a framework and guide for assessment of sustainability of service levels.   | ▸ 3-5 years  | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group       |
|                        | e. Complete assessments of the sustainability of current levels of service and report results.  | ▸ 5-10 years | ▸ Not started | ▸ All divisions<br>▸ Risk & Insurance Division                         |



## Risk & Resiliency

### The CRD will manage risk and build resilient infrastructure.

The capital region is becoming increasingly diverse, dynamic and exposed to disruptive and unpredictable events. To be resilient, assets must be adaptable to change.

To ensure this resiliency, the CRD will implement a risk management program that maintains a risk register. The organization will also complete risk analyses on all assets from an asset, service delivery and organizational risk perspective and will use outputs to make evidence-based decisions in the procurement of new assets and in the replacement of existing assets.

These robust risk management processes and well-defined levels of service will improve the CRD's resiliency.

#### Targets:

13. Infrastructure and levels of service that can adapt to changing conditions and recover rapidly from identified, disruptive events
14. An up-to-date analysis of asset risk, service delivery risk and organizational risk
15. The integration of demand change drivers factors — such as, but not limited to, population and demographic changes, climate change, legislative change and economic fluctuations — into future planning



| Action  | Timeline     | Status        | Associated Division(s) and Key Stakeholders  |
|---|--------------|---------------|--|
| 4.1. Provide asset management analysis to support adaptability to change:   |              |               |  |
| a. Identify key demand drivers and analyze demand trends, current demands and demand forecast.  | ▸ Ongoing    | ▸ In progress | ▸ All divisions  |
| b. Identify asset capacity, current demand and utilization; compare this to future demand forecast; and incorporate any required works into the operations and maintenance and capital planning programs. | ▸ Ongoing    | ▸ In progress | ▸ All divisions  |
| <b>PRIORITY ACTION</b>  |              |               |  |
| c. Align the Corporate Asset Management Strategy with Corporate Climate Action Strategy.  | ▸ 1-2 years  | ▸ Complete    | ▸ Asset Management Division<br>▸ Risk & Insurance Division                                   |
| d. Develop a climate adaptation program for critical infrastructure.  | ▸ 3-5 years  | ▸ In progress | ▸ All divisions<br>▸ Risk & Insurance Division   |
| e. Develop a natural disaster (seismic, wildfire, storms) mitigation program for critical infrastructure.   | ▸ 3-5 years  | ▸ Not started | ▸ All divisions<br>▸ Protective Services Division  |
| 4.2. Provide asset management analysis to support organizational and service delivery resiliency:   |              |               |  |
| a. Develop a framework for business continuity, including business impact analysis.   | ▸ 5-10 years | ▸ Not started | ▸ Asset Management Division<br>▸ Protective Services Division<br>▸ Risk & Insurance Division |
| b. Develop business continuity plans using business continuity framework  | ▸ 5-10 years | ▸ Not started | ▸ All divisions  |
| c. Consider participating in the Regional Resilience Assessment Program to measure and improve resilience to all hazards in Canada.   | ▸ 5-10 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group                             |
| d. Incorporate 5yr, 10yr, and 20+yr greenhouse gas reduction capital plans into sustainable service delivery plans as they become available.  | ▸ 3-5 years  | ▸ Not started | ▸ All divisions  |
| e. Perform a climate risk/vulnerability assessment aligning with the guidance of the forthcoming corporate adaptation plan.   | ▸ 3-5 years  | ▸ Not started | ▸ All divisions  |

Action table continues on next page.



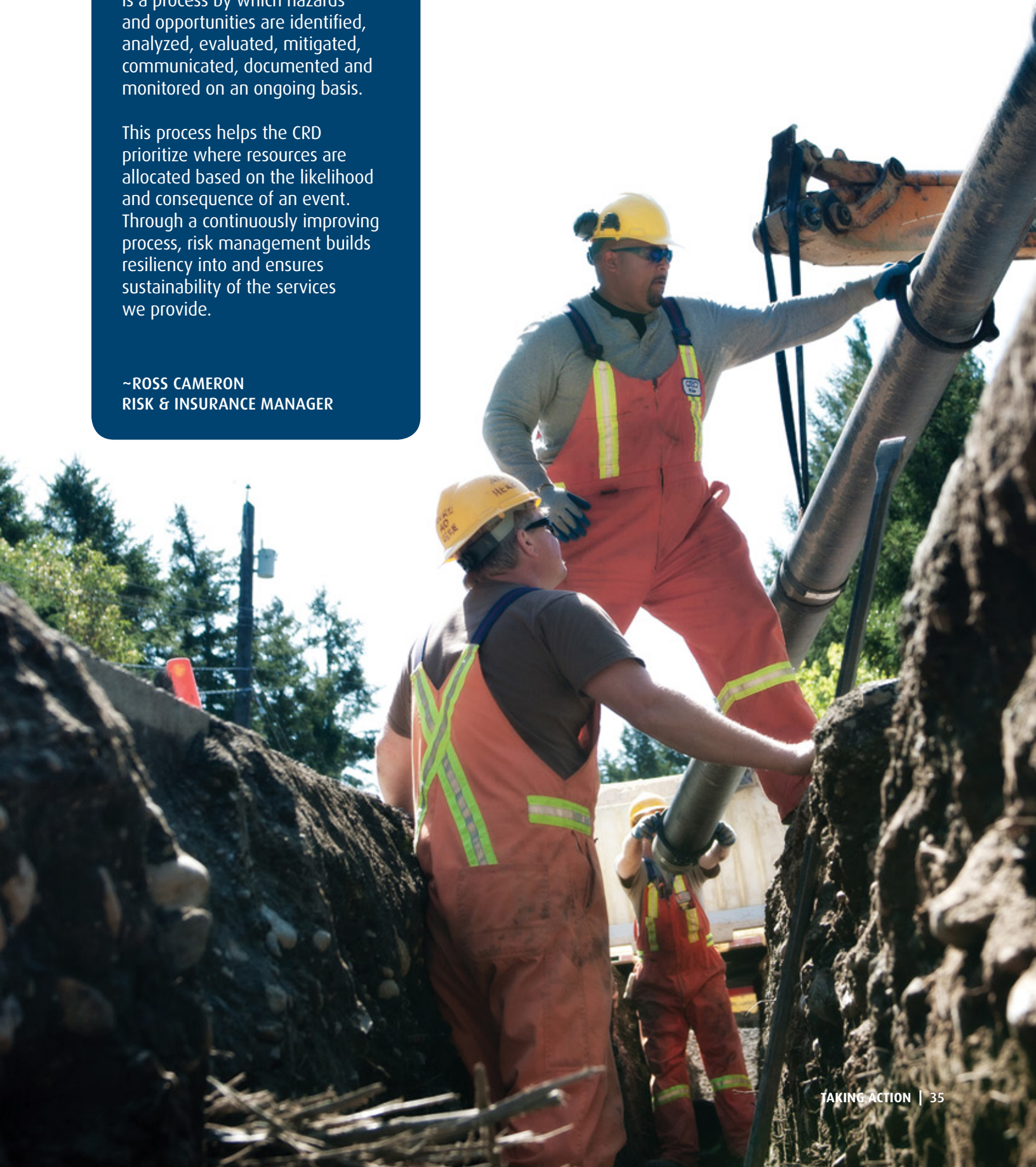
| Action  | Timeline    | Status        | Associated Division(s) and Key Stakeholders  |
|---|-------------|---------------|--|
| 4.3. Enhance understanding, management, analysis and reporting of risk to support informed decision-making:   |             |               |  |
| a. Develop an asset criticality assessment framework.   | ▸ 1-2 years | ▸ Not started | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Protective Services Division</li> <li>▸ Risk &amp; Insurance Division</li> </ul> |
| b. Develop a risk assessment and management framework and guide.  | ▸ 1-2 years | ▸ In progress | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Risk &amp; Insurance Division</li> </ul>   |
| c. Develop and implement training programs for asset criticality assessments, risk assessments and risk management.   | ▸ 3-5 years | ▸ Not started | <ul style="list-style-type: none"> <li>▸ Asset Management Division</li> <li>▸ Protective Services Division</li> <li>▸ Risk &amp; Insurance Division</li> </ul> |
| d. Implement criticality assessment program, identify critical infrastructure assets, develop action plans and establish review and reporting procedures.         | ▸ 3-5 years | ▸ Not started | <ul style="list-style-type: none"> <li>▸ All divisions</li> </ul>  |
| e. Implement risk assessment program, determine risk ratings for infrastructure assets, document mitigation plans, and establish review and reporting procedures. | ▸ 3-5 years | ▸ Not started | <ul style="list-style-type: none"> <li>▸ All divisions</li> </ul>  |
| f. Perform a hazard, risk and vulnerability analysis of CRD and specific analyses for the electoral areas.  | ▸ 1-2 years | ▸ In progress | <ul style="list-style-type: none"> <li>▸ Protective Services Division</li> <li>▸ Risk &amp; Insurance Division</li> </ul>                                      |

**RISK MANAGEMENT** in managing assets and delivering services is a process by which hazards and opportunities are identified, analyzed, evaluated, mitigated, communicated, documented and monitored on an ongoing basis.

This process helps the CRD prioritize where resources are allocated based on the likelihood and consequence of an event. Through a continuously improving process, risk management builds resiliency into and ensures sustainability of the services we provide.

~ROSS CAMERON  
RISK & INSURANCE MANAGER

Integrated Water Services crew replacing water pipe





## Financial Strategy

### The CRD will evaluate and include full life cycle costs in financial decisions.

When the assets that the CRD owns age and are exposed to demands that they weren't initially designed for, such as climate change, it is important to replace those assets and continue to deliver services in the most financially responsible way.

To do this, the CRD will create processes to help decision-makers understand the life cycle cost of an asset, including capital, operations and maintenance costs. This will help calculate the level of funding needed to be placed into capital and operational reserves for long-term financial sustainability and will provide visibility of the timing and cost of asset replacements.

#### Targets:

16. Needs-based budgets that are based on long-term financial plans for delivering agreed levels of service
17. Capital reserves for asset renewal funding that are based on asset management analysis of current state of infrastructure and long-term projection of asset renewals
18. Operational reserves that can fund variable reactive maintenance and periodic operations, inspections and preventative maintenance tasks that are completed less frequently than every year, i.e., once every two, five or 10 years
19. Implementation of financial policies that support asset management
20. Long-term financial plans that identify funding needs and consider full life cycle cost of ownership for all new capital assets and upgrades



| Action   | Timeline    | Status        | Associated Division(s) and Key Stakeholders                      |
|--|-------------|---------------|--|
| 5.1. Design and implement procedures to record operational and maintenance costs at an asset level.  | ▸ 1-2 years | ▸ Not started | ▸ All divisions  |
| 5.2. Review current cost tracking for infrastructure assets; identify improvements to be implemented in enterprise asset management system; and define relationships between asset management data, analysis, reports and informed decision-making.  | ▸ 1-2 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
| 5.3. Generate needs-based budgets based on financial data in sustainable service delivery plan documents and analyses:   |             |               |  |
| a. Develop a framework for short- and long-term financial and work plans for operations, maintenance, renewals and capital planning, based on agreed levels of service, including standardized methods for determining asset replacement values.   | ▸ 1-2 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
| b. Create short- and long-term financial and work plans for agreed service delivery, in accordance with framework, and maintain them:<br>▸ long-term renewals plans based on expected service life<br>▸ 5yr, 10yr and 20+yr capital (new assets) plan based on future need analysis<br>▸ long-term maintenance and operations plans include post-construction and ongoing operations, maintenance and inspections costs for new assets scheduled in the 5yr, 10yr, and 20+yr capital plans | ▸ 3-5 years | ▸ Not started | ▸ All divisions  |
| c. Determine needs-based budgets by comparing short- and long-term financial and work plans with forecast revenue; identifying gaps; and considering options and service delivery impacts.   | ▸ 3-5 years | ▸ Not started | ▸ All divisions  |
| 5.4. Develop an asset (infrastructure) funding strategy.   | ▸ 3-5 years | ▸ In progress | ▸ All divisions  |
| 5.5. Develop a capital reserve policy.   | ▸ 3-5 years | ▸ In progress | ▸ Financial Services Division                                    |
| 5.6. Develop a capital reserve account for infrastructure assets.  | ▸ 3-5 years | ▸ In progress | ▸ Financial Services Division                                    |
| 5.7. Review connectivity between asset data for Public Sector Accounting Board (PSAB) financial reporting and asset data for asset management analysis and supporting informed decision-making and identifying improvement actions.  | ▸ 3-5 years | ▸ In progress | ▸ Asset Management Division<br>▸ Financial Services Division     |



## Transparency

### **The CRD will establish a systematic and integrated approach to asset management and require rigorous and transparent processes.**

The CRD is committed to developing functional policies, technical standards, plans and processes that achieve a consistent approach to asset management practices across the organization.

The CRD's corporate asset management framework is built on its Corporate Asset Management Policy, which provides the mandate to practice asset management. Other strategic documents, such as this Corporate Asset Management Strategy, link to corporate documents and provide implementation guidance.

The CRD will adopt an integrated approach that interweaves processes with other management systems, such as quality, environment, risk and health and safety management. This will improve cross-departmental coordination, optimize processes and reduce risks.

#### **Targets:**

- 21.** An asset management program that complies with statutory requirements and aligns with other relevant CRD policies and corporate documents
- 22.** A corporate asset management program manual that compiles scalable templates, process flow maps, procedures, processes and technical guides to enable all divisions to follow an approved and consistent approach to implement asset management
- 23.** Routine status reports that communicate the condition of assets, target service levels and service level performance, costs, risks and options





**PRIORITY ACTION**

| Action  | Timeline    | Status        | Associated Division(s) and Key Stakeholders  |
|---|-------------|---------------|--|
| <p>6.1. Develop and implement a corporate asset management program manual, including requirements and guidance relating to:</p> <ul style="list-style-type: none"> <li>▶ alignment between the Corporate Asset Management Strategy and sustainable service delivery plans and CRD policies and relevant corporate documents</li> <li>▶ compliance of asset management practices with statutory and regulatory requirements</li> <li>▶ a framework for implementation and continuous improvement of consistent asset management practice across the CRD</li> <li>▶ relevant templates, standards, process flow diagrams, methodologies or approaches to be used; scalability for different applications; available tools; knowledge area matrix; and examples to assist staff</li> </ul> | ▶ 1-2 years | ▶ In progress | <ul style="list-style-type: none"> <li>▶ Asset Management Division</li> <li>▶ Asset Management Steering Group</li> </ul> |
| <p>6.2. Communicate the outcomes and impacts on the environment, society, culture and economy from asset management inputs, activities and outputs.</p>   | ▶ 3-5 years | ▶ In progress | <ul style="list-style-type: none"> <li>▶ Asset Management Division</li> <li>▶ Asset Management Steering Group</li> </ul> |



## Continual Improvement

**The CRD will commit to continual improvement, encouraging innovation of asset management practices and service delivery.**

This organization's asset management program is exposed to a dynamic environment.

A continuous improvement practice is fundamental to ensuring the CRD can adapt to this environment. Key performance indicators will be established to monitor progress against targets and to ensure the system can be adjusted when necessary.

### **Targets:**

24. An asset management continuous improvement process and program that is resourced appropriately with staff and funding
25. Established key performance indicators and regular reports on the performance of CRD asset management, including:
  - ▶ annual progress reports about the Improvement Action Plan
  - ▶ reports on corporate and divisional asset management maturity
  - ▶ reports on how effectively asset management initiatives are achieving intended outcomes
26. Development and implementation of asset management training programs to educate staff and establish and maintain an asset management knowledge base within the CRD to support organizational resiliency
27. Defined asset management maturity levels at divisional and corporate levels



|                        | Action   | Timeline    | Status        | Associated Division(s) and Key Stakeholders                      |
|------------------------|--|-------------|---------------|--|
| <b>PRIORITY ACTION</b> | 7.1. Develop and maintain a prioritized list of asset management Initiatives with estimated budget and resource needs.   | ▸ Ongoing   | ▸ In progress | ▸ All divisions  |
|                        | 7.2. Develop a mechanism to provide financing and resources for asset management initiatives.  | ▸ 1-2 years | ▸ Not started | ▸ Asset Management Division<br>▸ Financial Services Division     |
| <b>PRIORITY ACTION</b> | 7.3. Develop a method for assessing asset management maturity.   | ▸ 1-2 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
| <b>PRIORITY ACTION</b> | 7.4. Conduct an asset management maturity assessment for each division.  | ▸ 1-2 years | ▸ In progress | ▸ All divisions  |
|                        | 7.5. Develop corporate key performance indicators.   | ▸ 3-5 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
|                        | 7.6. Develop and implement enhanced learning and development program for asset management.   | ▸ 3-5 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
|                        | 7.7. Perform an organizational structure assessment to determine how to efficiently conduct asset management, and develop a methodology to determine demands of delivering the service to human resource capacity and utilization. | ▸ 3-5 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
|                        | 7.8. Facilitate working groups that contribute to continuous improvement of data and reports.  | ▸ 3-5 years | ▸ Not started | ▸ Asset Management Division<br>▸ Asset Management Steering Group |
|                        | 7.9. Integrate asset management continual improvement initiatives into the CRD corporate plan.   | ▸ 1-2 years | ▸ In progress | ▸ Asset Management Division<br>▸ Asset Management Steering Group |

# APPENDIX: RISK ASSESSMENT TABLE

This table summarizes the most likely strategic risks related to implementation of this Corporate Asset Management Strategy and Implementation Action Plan. See [Implementation on page 16](#) for more details.

| Risk No. | Potential Risk & Description   | Forecast Impact   | Mitigation Options   |
|----------|--|---|--|
| R1.01    | <p><b>Failure to get Board endorsement:</b><br/>The Board does not support asset management initiatives.</p>   | <ul style="list-style-type: none"> <li>▶ Difficulty in achieving successful maturity of asset management</li> </ul>                           | <ul style="list-style-type: none"> <li>▶ Include the Board early on in the CRD's asset management initiatives.</li> <li>▶ Draft a policy and strategy for asset management to embrace stewardship role and responsibility.</li> <li>▶ Provide regular status updates through staff reports on the progress of asset management initiatives.</li> </ul> |
| R1.02    | <p><b>Inadequate communication within the community</b><br/>The local community expects to have an opportunity to be advised and consulted on how tax dollars are being invested. Engagement with community is key to educate them on our asset management initiatives, their importance and the risks of failing to proactively manage publicly owned assets.</p> | <ul style="list-style-type: none"> <li>▶ Unwillingness by residents to pay the costs</li> <li>▶ Unclear expected levels of service</li> </ul> | <ul style="list-style-type: none"> <li>▶ Engage with the community when developing plans.</li> <li>▶ Provide more transparency on publicly owned assets, regarding condition, service life, risk and cost.</li> </ul>  |
| R1.03    | <p><b>Unclear roles and responsibilities</b><br/>Each level has differing roles and responsibilities within the CRD. Board members have a stewardship and an oversight role, while staff have an implementation and reporting role to the Board.</p>   | <ul style="list-style-type: none"> <li>▶ Overlapping efforts within team members</li> <li>▶ Missed performing activities</li> </ul>           | <ul style="list-style-type: none"> <li>▶ Document roles and responsibilities clearly so they are easy to understand, and communicate them out to appropriate members.</li> </ul>   |
| R1.04    | <p><b>Undefined level of service</b><br/>Level of service is a measure of the quality, quantity and/or reliability of a service from the perspective of residents, businesses and customers in the community.</p>  | <ul style="list-style-type: none"> <li>▶ Unclear performance targets</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Define level of service based on customer expectations.</li> </ul>  |
| R1.05    | <p><b>Failure to prioritize high-risk assets</b><br/>Investing in high-risk assets is critical to ensuring the delivery of the service is sustained.</p>   | <ul style="list-style-type: none"> <li>▶ Unexpected asset failures</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Assess risk and identify criticality on core assets.</li> </ul>   |
| R1.06    | <p><b>Implementing too many initiatives</b><br/>Asset management is a complex but scalable practice. It is an evolutionary process that takes years to build onto the CRD's existing practices.</p>  | <ul style="list-style-type: none"> <li>▶ Slow progress</li> <li>▶ Low morale within staff</li> </ul>  | <ul style="list-style-type: none"> <li>▶ Start small and continually build on small wins.</li> </ul>   |

| Risk No. | Potential Risk & Description  | Forecast Impact  | Mitigation Options   |
|----------|---|--|--|
| R1.07    | <p><b>Disconnected organizational effort</b></p> <p>Asset management is an integrated business process that requires different divisions within the CRD to interact and develop sustainable service delivery plan.</p>  | <ul style="list-style-type: none"> <li>▶ Inaccurate plans</li> <li>▶ Inefficient process</li> </ul>  | <ul style="list-style-type: none"> <li>▶ Create a cross-functional team that integrates the different departments/divisions.</li> </ul>  |
| R1.08    | <p><b>Unidentified asset risks</b></p> <p>Asset management involves risk management, and it is critical that asset risks are assessed to aid in the decision-making process in operations and planning.</p>   | <ul style="list-style-type: none"> <li>▶ Unexpected asset failures</li> </ul>  | <ul style="list-style-type: none"> <li>▶ Develop a risk management framework.</li> <li>▶ Assess asset risks.</li> </ul>  |
| R1.09    | <p><b>Lack of a long-term financial plan greater than five years</b></p> <p>A key fundamental is linking long-term renewal plans with the long-term financial plan. An industry best practice on the planning horizon for a long-term plan is a minimum 10 years.</p>                                       | <ul style="list-style-type: none"> <li>▶ Uncertainty in financial liabilities</li> <li>▶ High risk in not delivering the defined level of service</li> </ul> | <ul style="list-style-type: none"> <li>▶ Develop 10-year plans.</li> </ul>   |
| R1.10    | <p><b>High rate of outsourcing asset management</b></p> <p>Using consultants to aid in the CRD's asset management activities is a reasonable approach depending on internal capacity. However, too reliant on external resources will inhibit building asset management maturity within internal staff.</p> | <ul style="list-style-type: none"> <li>▶ Slow progress on building internal capacity for practising asset management practices</li> </ul>                    | <ul style="list-style-type: none"> <li>▶ Carry out asset management workshops to train internal staff.</li> <li>▶ Ensure that proper rationale is developed when engaging external resources.</li> </ul> |
| R1.11    | <p><b>Failure to track performance</b></p> <p>Set performance targets relating to the performance of assets and asset management practices in order to be able to measure outcomes.</p>   | <ul style="list-style-type: none"> <li>▶ Difficulty in achieving continuous improvement</li> </ul>   | <ul style="list-style-type: none"> <li>▶ Develop key performance indicators.</li> </ul>  |

*At CRD, we're changing our definition of business as usual by incorporating climate action into the culture of the organization.*

*Global climate models project an average annual warming of about 3°C in our region by the 2050s. While that may seem like a small change, it is comparable to the difference between the warmest and coldest years of the past and will impact many aspects of our operations, including provision of drinking water, the resiliency of ecosystems in regional parks, and the design, construction and maintenance of our buildings and infrastructure.*

*The asset management process integrates a climate change lens into each stage of the asset life cycle, from planning to operations, through to decommissioning.*

*By reducing CRD's contribution to global greenhouse gas emissions and preparing our assets to withstand the impacts of climate change, CRD can foster the sustainable, resilient region that the public and future generations expect of us.*

**~LIZ FERRIS  
CORPORATE CLIMATE ACTION COORDINATOR**

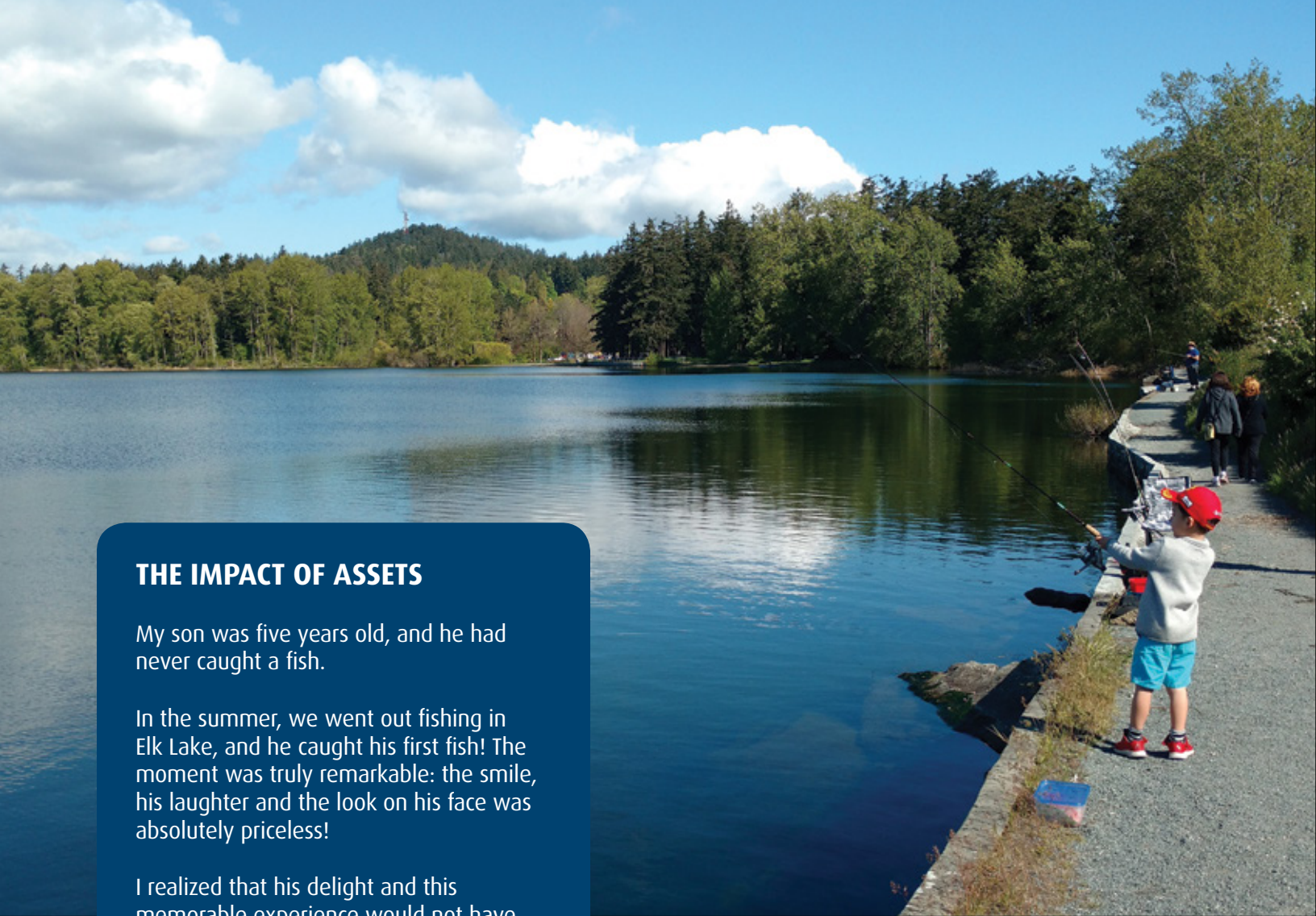


CRD fleet with electric bikes and vehicles





*The Corporate Asset Management Strategy  
was edited and designed by Rachel Penner.*



## THE IMPACT OF ASSETS

My son was five years old, and he had never caught a fish.

In the summer, we went out fishing in Elk Lake, and he caught his first fish! The moment was truly remarkable: the smile, his laughter and the look on his face was absolutely priceless!

I realized that his delight and this memorable experience would not have been possible if it weren't for the CRD staff who create such a wonderful and safe environment at Elk Lake specifically and at all the regional parks more generally.

With this, I give the entire team a BIG thank you as neither I nor my son will ever forget our special afternoon together.

~CRD RESIDENT

**CRD** | Capital Regional District

625 Fisgard Street  
Victoria, BC V8W 2S6  
250.360.3000

Website: [www.crd.bc.ca](http://www.crd.bc.ca)  
Twitter: @crd\_bc  
Facebook: Capital Regional District