



Quinte
CONSERVATION



2023

CAPITAL ASSET MANAGEMENT PLAN

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Executive Summary

Quinte Conservation's Capital Asset Management Plan (AMP) outlines the strategic approach to effectively manage and maintain the organization's physical assets. The plan aims to optimize asset performance, ensure long-term sustainability, and support Quinte Conservation's mission of preserving and restoring the natural environment. By implementing best practices in asset management, Quinte Conservation will enhance operational efficiency, reduce lifecycle costs, and maximize the value of its assets.



Introduction

1.1 Purpose

Conservation Authorities are responsible for the management of a diverse range of capital assets. In addition to significant land holdings, there are many other major classes of tangible capital assets (TCA) that support basic authority services related to conservation, restoration, development, and management of natural resources.

Figure 1 illustrates this diversity of TCA. The purpose of this AMP is to establish a comprehensive framework for the management and maintenance of Quinte Conservation's assets. It aims to prioritize investments, assess risks, and ensure the efficient utilization of resources to deliver sustainable environmental stewardship.



1.2 Background & Scope

This plan encompasses the management of tangible assets such as buildings, infrastructure, equipment, vehicles, and natural areas. It also includes intangible assets such as data and information systems necessary for effective asset management.

Quinte Conservation's (QC) infrastructure is aging while demand for better public services is growing in response to higher standards of safety, health, environmental protection, and growth. In 2009, standards within the Public Sector Accounting Board (PSAB) were amended and requires Conservation Authorities to report on our tangible capital assets in our Audited Financial Statements. QC has followed this direction since the implementation to ensure compliance. Under the new standards, the full cost of acquisition or construction of an asset is no longer recognized as an expenditure in the year in which it occurs. Instead, the cost of the asset is spread over the asset's estimated useful life as an amortization expense.

To comply with the standards in 2009, QC gathered information on the assets they owned, and created a database to track current assets and assets purchased in subsequent years. This information was used primarily as part of the audit process. This database provides the foundation for improving asset management practices at QC. The information required to be PSAB compliant was primarily backward looking. It considered historical cost (or reasonable estimates where necessary), annual amortization, accumulated amortization, and the resultant current net book value of assets. Looking forward, this AMP will take the PSAB information and introduce life expectancy based on actual asset condition, expected rates of deterioration, future required service levels, and estimated future replacement costs.

Although this is a new practice for QC, the development of an AMP is an essential part of QC's ongoing fiscal responsibility framework. It will guide the purchase, use, maintenance, and disposal of every asset QC needs to conduct business. The goal of every AMP is to define the use of assets in efforts to streamline productivity and delivery with minimal loss of capital.

The AMP will support QC's budgeting, planning, and forecasting processes and inevitably improve transparency, efficiency, and collaboration between user groups. The plan will improve and enhance data quality and reliability. This plan seeks to identify what we have, what condition it is in, and what the anticipated needs are to maintain our infrastructure as we move forward. It will also discuss estimates regarding future needs both from the perspective of preserving existing infrastructure and anticipated future new asset acquisitions and capacity enhancements.

The AMP was coordinated and developed with input from staff of several departments within QC regarding their applicable assets. A determination was made of which assets need to be managed and replaced based on an estimated life cycle of 5, 10, 15, 20, 30 or 40-years depending on the asset classification.

For dam infrastructure the life cycle was estimated at a 40-year cycle. In 2019, QC commissioned a consulting firm to focus on the Water and Erosion Control Infrastructure Assets held by QC. Maintenance forecasts for the water management infrastructure assets was forecasted over a 10-year cycle in efforts to improve the safety and reliability of these 40 structures. QC recognizes the significance of these assets and through the support of the Board of Directors and our benefitting municipalities, a 10-year capital plan was approved and includes annual contributions by way of a special levy to be held in reserve accounts for major capital works to ensure our dams and weirs are maintained. The water management infrastructure asset management plan will be phased into the AMP at a later date.

Asset Inventory and Condition Assessment

2.1 Information Technology Infrastructure

QC has a heavy operational dependency on Information Technology (IT) and Information Management (IM), including wide and local area networks, application and database servers, intranet, internet, public facing web assets and webservers, telecommunications, personal computers, and email. The potential loss of operational control of essential services and impact on stakeholders (e.g., clients or personnel) that may occur in the event of an interruption to IT/IM services, necessitates the need for continued preparation, implementation, and maintenance of a comprehensive IT/IM business continuity strategy.

Currently, QC maintains a network utilizing hypervisor technology to deliver the high availability of day-to-day operations. Several virtual machines run the following primary applications: MS Server and Active Directory, database servers, file servers, watershed monitoring applications, enterprise content management systems, accounting systems, GIS, and webservers. These servers, coupled with various network hardware components (e.g., routers, switches, and network storage) and other cloud-based SaaS (Software as a Service) resources are critical to the daily operations of QC and play a vital role in key program areas such as flood forecasting and warning.

2.1.1 Network Infrastructure Replacement Initiative

To maintain the high standards and availability of QC's network infrastructure, critical components must be replaced within the predicted lifespan of the hardware. The initiative will see the renewal of infrastructure actively planned and renewed on a regular basis to ensure QC is on pace to meet the needs of its users and clients. The set schedule of renewal will ensure continually sustainable work environments that are free from disruption and failure. The risks associated with not renewing network infrastructure include, but are not limited to:

- Unplanned downtime leading to disruption of QC business;
- Unplanned expenses related to unexpected server, switch, and storage renewal;
- Loss of data;
- Increased negative perception of technology due to aging infrastructure;
- Unplanned loss and ability to respond in emergency situations;
- Potential loss of ability to communicate with partners during critical emergencies;

2.1.2 Cybersecurity Initiative

Not to be overlooked, the implementation of an effective cybersecurity program at QC is a crucial component in protecting IT/IM resources from damaging digital attacks and costly data recovery efforts. With an ever-increasing dependency on digital resources and the constant threat of new and evolving attack vectors, it is imperative that QC maintains an exceptional and proactive approach to cybersecurity management. Consequently, QC should protect IT/IM infrastructure through:

- Conducting routine cybersecurity training/campaign programs with staff to reduce the risk associated with human error.
- Routinely assessing the effectiveness of chosen detection and response platforms (upgrading as necessary)
- Ensuring network security best practices are implemented, routinely reviewed, and amended as required.



2.1.3 Server Room Maintenance Initiative

To maintain the business continuity of QC's network infrastructure and communication systems, the maintenance and repairs to the server room location needs to be reviewed on an annual basis. The maintenance and repairs include the following:

- Cooling systems renewal for server room;
- Back-up power systems renewal for main office

When a server room is not maintained correctly it presents significant risk related to:

- Early failure of equipment due to inadequate cooling;
- Disruption of service or loss of data due to power failures for power conditioning;
- Exposure to liability for inadequate record retention if servers damaged;

The maintenance of these systems will ensure the longevity of the hardware and ensure sustainability and high tolerance. QC has budgeted for the replacement of cooling systems after 10 years and the battery back-ups every 5 years.



2.1.4 Workstation Replacement Initiative

QC has recognized a need to budget the replacement of workstations to maintain business continuity. The initiative will see the renewal of workstations actively planned and executed on an annual basis. The set schedule of renewal will ensure a continually sustainable work environment that is free from disruption and failure. The risks associated with not renewing workstations include:

- Unplanned downtime leading to disruption of QC business;
- Unplanned expenses related to unexpected computer renewal;
- Loss of data;
- Increased negative perception of technology due to aging infrastructure.

Workstations have been budgeted for a five-year replacement cycle. The workstations required by users at QC are dedicated by their software and hardware requirements. Several resource intensive client-side applications are in use at QC including:

- GIS applications
- CAD applications
- Graphic design / photo and video editing applications
- Environmental modelling and statistical applications

Users whose primary job function is the intensive use of the above-mentioned application categories are referred to as “Technical Workstation Users”. Staff members who use the software on a periodic basis are referred to as “Business Advanced Users”. The remaining staff are considered “Business Standard Users” and do not use resource intensive client-side applications and predominantly rely on office or server-side applications.

2.1.5 Software requirements

- Technical Workstation Users
 - GIS applications; CAD applications; graphic design / photo and video editing applications; environmental modelling and statistical applications; office and server-side applications
 - Example users: GIS staff, communications staff.
 - Workstations will be extended core machines, those which have additional CPUs, RAM, and dedicated video cards.
- Business Advanced Users
 - CAD applications; environmental modelling and statistical applications; office and server-side applications
 - Example users: water resources staff, monitoring staff.
 - Workstations will be extended core machines, those which have additional CPUs and RAM.
- Business Standard Users
 - Office and server-side applications
 - Example users: administration, field operations staff, forestry staff, planning and regulations staff, meeting room computers, summer staff.
 - Workstations considered to be core machines, those which have average performance CPU and RAM allocations.

This strategy has a phased approach since workstation requirements from various groups cannot be completely fulfilled at present time. Workstations coming out of full-time staff use are to be set aside for students and employment programs, as required.

Each of these classes requires the maintenance of a battery backup system at the workstation location. These battery backup systems are intended to provide the user time to save and shut down the computer in the event of a power outage and provide limited power during a brownout or power “Flicker”. These battery backup systems are considered part of each of these desktop computer systems and are therefore included in the replacement costs moving forward with the strategy.

2.1.6 Phone System Replacement Initiative

The current phone system includes both a Private Branch Exchange (PBX) desk top phone set as well as mobile devices for many staff. The mobile devices form part of QC’s essential communication plan. Currently, the mobile phone package includes 30 devices ranging from 2017 – 2023. The PBX system is approximately 10 years old and no longer compatible with QC’s automated system for some features. The aging infrastructure will cause higher likelihood of service disruption. The risks associated with not keeping the phone system current include:

- Unplanned downtime leading to a disruption in service and administration of QC functions;
- Unplanned loss and ability to respond in emergency situations;
- Unplanned expenses related to unexpected equipment failure;
- Loss of voicemail data;
- Increased negative perception of technology due to aging equipment.

Mobile devices are budgeted for a 5-year life cycle. The PBX system is budgeted for a 15-year life cycle.

2.1.7 Standard Office Equipment

Quinte Conservation has a variety of office equipment required to perform administrative duties. This equipment includes copiers, printers, a wide-format plotter/scanner, and a variety of audio/visual equipment (board room TV, meeting room monitors, postage meter, etc.). This type of equipment has a 10-year replacement schedule.

2.1.8 Information Technology Infrastructure Financial Implications

QC’s core servers, storage network, computer and office equipment are in reasonably good condition while some of the remainder of our network infrastructure is in fair condition. The financial implications (estimated cost per year for the strategy described) to replace the aging infrastructure and to maintain licensing fees is described below.

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$76,706	\$99,507	\$76,726	\$118,475	\$92,059	\$106,662	\$87,889	\$79,817	\$109,357	\$103,309

Annual Average
\$95,051

Some notes regarding the values include the following:

- CPI adjustments at 2.5% per year;
- Replacement costs not used (using acquisition costs for calculations) - in some cases, replacements are cheaper, in others, higher);
- Monitors not factored into PC replacements (their useful life tends to be significant, and replacement is infrequent);
- QC has many users with both desktop and laptop - business/cost savings strategy will be to move away from desktops and run 1 machine only for most users by 2030 (some exceptions to this exist).

For budgeting purposes, the average 10-year capital cost of \$95,051 will be incorporated into the 2024 budget onwards as a capital expenditure. Any part of the budget that is unspent in the current year is to be carried forward and placed in a reserve account to ensure QC has the necessary funds to support the annual costs of maintaining the Information Technology infrastructure throughout QC.



2.2 Vehicles

QC owns and maintains a small fleet of vehicles to deliver various programs and services. QC's current fleet includes 14 vehicles used for monitoring, forestry operations, dam operations and inspections, regulations and planning, stewardship, and a variety of other corporate services such as attending meetings and general uses. Some of these vehicles are used to carry and trailer equipment including boats, canoes, surveying equipment, generators, pumps, sampling equipment, electro-fishing equipment and specialized dam operation gear. During peak months, vehicles are fully utilized, and staff are occasionally required to use personal vehicles as necessary.

All Terrain Vehicles (ATV) and trailers that are used in conjunction with our vehicles are also included in the vehicle section of the Asset Management Plan. ATVs are used to access remote locations within QC's jurisdiction to perform dam operations and inspections as well as forestry operations.

The Forwarder is a specialized piece of equipment used in several different program areas. As an example, staff would utilize it to perform operations and maintenance of booms at our water control structures, hazardous tree and log removal as part of our conservation area maintenance program and for forestry operations.

Some notes regarding the values include the following:

- CPI adjustment at 2.5 % per year on the annual summary value (not applied to each individual asset);
- All replacements costs used in the plan are estimates based on a value range from Autotrader in July 2023;
- All current values have been reduced by 5% each year following 2024;

The following table shows the vehicle fleet, acquisition date and estimated 2023 value:

Description	Acquisition Year	Current Value
2008 Dodge Ram	2008	\$6,500
2008 Ford 3 Ton (Dump)	2008	\$20,000
2008 Ford F150	2008	\$7,000
2011 Chevy Silverado	2011	\$12,995
2012 Dodge Caravan	2014	\$2,000
2012 Dodge Ram	2012	\$14,000
2012 Honda Civic	2012	\$5,000
2014 Jeep Cherokee	2014	\$9,000
2015 Dodge Caravan	2015	\$7,000
2016 Ford F150	2016	\$15,000
2017 Ford Focus (Electric)	2017	\$14,000
2022 GMC - Lease (\$900/month)	2022	N/A
2022 Chevy - Lease (\$900/month)	2022	N/A
2022 Chevy - Lease (\$900/month)	2022	N/A
Flatbed Trailer	2000	\$2,000
ATV Trailer	2000	\$2,000
Forwarder (logging and dam operations)	2000	\$5,000
ATV x4	2015 - 2018	\$4,500

The risks associated with not replacing QC's vehicle fleet include:

- High maintenance and repair costs;
- Health and Safety concerns;
- Liability concerns;
- Disruption in services.

2.2.1 Vehicle Financial Implications

QC’s fleet of vehicles is in fair condition but requires some immediate investment. Vehicle ages rang from new (3 newly leased vehicles in 2022) to several vehicles beyond their life expectancy of 15-20 years (depending on asset). The financial implications to bring the vehicle fleet to meet operational needs is as follows:

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$58,350	\$60,629	\$83,689	\$90,085	\$94,600	\$47,588	\$68,540	\$88,713	\$32,760	\$23,888

Annual Average
\$64,884

For budgeting purposes, the average 10-year capital cost of \$64,884 will be incorporated into the 2024 budget onwards as a capital expenditure. Any part of the budget that is unspent in the current year is to be carried forward and placed in a reserve account to ensure QC has the necessary funds to support the annual costs of the Vehicle fleet.



2.3 Facilities and Conservation Areas

QC maintains lands and infrastructure throughout the entire watershed. In total, QC owns and manages approximately 30,000 acres of land. There are several buildings located on QC properties that all require general upkeep and maintenance to ensure they remain safe and in good standing. Some of these building assets remain locked or are rented to external agencies. QC's main administrative building is located at Potters Creek Conservation Area in Quinte West with the primary location for Field Operations staff and equipment being located at the Vanderwater Conservation Area. Other locations that have infrastructure and buildings include the Frink Centre, Depot Lakes, O'Hara Mill and Macaulay Mountain properties. The O'Hara Mill property is primarily maintained by a volunteer association and has not been included with this plan because the group is responsible for all assets located on the property.

A legacy building and workshop remain at the Macaulay Mountain Conservation Area. These buildings were the former Prince Edward Region main office and are no longer used by Quinte Conservation. Currently the location is leased to a cadet group. Signage, walkways, trails, bridges, parking lots, gates, picnic shelters and tables are some of the features located at our twelve conservation areas that form our destination sites in accordance with the QC Lands Committee recommendations and QC Board approval.

The following Facilities and Conservation Areas will require capital improvements over the next 10 years and include the following generalized items:

- Beaver Meadow Conservation Area - parking lot and access improvements, picnic tables, signage, trail improvements;
- Deerrock Lake Access – building upgrades, boat launch improvements, washroom facility upgrades (privy);
- Depot Lakes Conservation Area – accessibility improvements, trail network and bridge maintenance, gate system and maintenance, parking lot, picnic shelter, picnic tables, washroom maintenance, signage, building maintenance including flooring, roof, washroom, septic, windows;
- Frink Centre Conservation Area – boardwalk replacement, gate, parking lot, pavilion (roof, painting, etc.), picnic tables, washrooms, signage, trail maintenance and upgrades;
- Little Bluff Conservation Area – fencing, gate maintenance; parking and access, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Macaulay Mountain Conservation Area - building and workshop demolition, gate system and maintenance, parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Potters Creek Conservation Area and Administrative Building – appliance replacement, lunchroom upgrades, cooling system, heating system, back-up generator replacement, board room upgrades to audio visual, tables and chairs, exterior and interior upkeep, office roof, sewage system, storage facility maintenance, pavilion upgrades to exterior and interior; pavilion roof, general access Improvements, Other properties abandoned water wells on QC land, legal surveys for land holdings, gate system and maintenance, parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Massassauga Point Conservation Area – fencing, gate system and maintenance, parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Sheffield Conservation Area - parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Sidney Conservation Area - parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades;
- Vanderwater Conservation Area - gate system upgrade and maintenance, parking lot and access improvements, picnic shelter, picnic tables, washrooms, signage, trail maintenance and upgrades, concrete repairs to building, building maintenance, washroom upgrades and sewage system, heating, and cooling system replacement.

The risks associated with not maintaining and upgrading our facilities and conservation areas include:

- Loss of revenue;
- Disruption of services;
- Increased maintenance and repair costs;
- Health and safety concerns for staff and the public.

2.3.1 Facilities and Conservation Areas Financial Implications

QC facilities and conservation areas are in fair to good condition, and QC must continue to meet health and safety standards as well as provide the public the necessary facilities to enjoy these destination properties. The financial implications to ensure QC facilities and conservation areas meet requirements are as follows:

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$110,500	\$110,700	\$105,000	\$110,188	\$100,650	\$106,875	\$112,700	\$109,863	\$97,200	\$103,206

Annual Average
\$106,688

Some notes regarding the annual values include the following:

- CPI adjustment at 2.5 % per year on the annual summary value (not applied to each individual value);
- Pricing is estimated based on current available information;
- Any investment in our assets made prior to 2023 has been included within our schedules (i.e., new storage facility, some gate systems) but not included as an annual cost;

For budgeting purposes, the average 10-year capital cost of \$106,688 will be incorporated into the 2024 budget onwards as a capital expenditure. Any part of the budget that is unspent in the current year is to be carried forward and placed in a reserve account to ensure the necessary funds required to support the annual costs of QC’s facilities and conservation areas.





2.4 Flood Forecasting and Warning and Watershed Monitoring Equipment

QC owns and manages 30,000 acres of land, 43 water control structures, a hydro-electric facility, campground, office buildings and 12 destination areas. With this comes the need to have lots of different equipment including power tools, boats, tractors, trailers etc. QC field staff require a tractor with various attachments for everyday maintenance work. QC relies on landscaping equipment to complete general maintenance around conservation areas. QC's extensive trail network is maintained with the same equipment as well as groomers for cross country skiing. Staff require chainsaws, brush saws, pole saws, and other equipment to assist in dam operations, trail maintenance, hazard tree removal, snow removal and more.

All this equipment is considered a necessity for Quinte Conservation to conduct business.

2.4.1 Flood Forecasting and Warning

QC owns and operates a variety of monitoring stations to collect weather and hydrologic data that is used in flood and drought monitoring as well as supporting other programs (e.g., watershed planning, climate change, Bay of Quinte, Provincial Groundwater Monitoring Network, Provincial Water Quality Monitoring Network, etc.). QC also relies on Environment Canada's hydrometric network stations where some QC owned sensors such as rain gauges, air and water temperature probes, soil probes, snow depth sensors, etc. have been installed. In addition, QC has groundwater sampling locations where the sites are operated and maintained by QC, but the equipment is owned by the province.

The equipment that QC owns and relies on for timely flood and drought monitoring must be maintained to a high standard to ensure data accuracy. Most monitoring stations consist of data loggers, sensors, solar panels, and some have equipment shelters.

A full list of QC's networks of gauge stations and equipment can be found in the appendix. Some equipment is essential to the Flood Forecasting and Warning program as well as the drought preparedness program. This equipment must be maintained to a high standard. In the past, QC has often accepted generous donations of equipment from Environment, Climate Change Canada (ECCC), the Ministry of Natural Resources and Forestry (MNRF) and Ministry of Environment, Conservation and Parks (MECP) such as data loggers, rain gauges, lake level gauges, etc. Having the ability to receive these types of donations is a tremendous help in upgrading our hydrometric monitoring network, however they cannot be expected on a continuous basis. If QC's equipment and network are at risk of falling due to lack of maintenance/replacement, QC risks losing important data, dealing with more difficult repairs, increased costs associated with repairs and a loss of credibility with the public because QC will not be able to provide accurate and up to date information during emergencies.

2.4.2 Watershed Planning and Monitoring Equipment

QC has an extensive watershed monitoring program to meet not only the provincial requirements set out in the Conservation Authorities Act but also to demonstrate the health and well being of our natural resources within the Quinte region. QC’s team examines the biological, physical, and chemical components of the watershed including surface water, groundwater, aquatic, wildlife, wetland, and terrestrial components. The monitoring programs provide important information used by QC staff, and many watershed stakeholders including our municipal partners and other government agencies, developers, consultants, academia, ENGO’s and residents. Overall watershed health is evaluated as well as assessment of important indicators and components of the watershed. The data and information collected provide point in time information and identifies trends and change over time in watershed health. The work QC completes as part of their robust monitoring network not only informs QC’s management programs but also informs federal and provincial programs including species at risk, forest bird inventories, Great Lakes Wetland Health, provincial biodiversity programs, and Ontario invasive species programs. The information collected through some of the monitoring programs is submitted to provincial and federal databases in accordance with agreements, collection permits and licences.

To carry out the various monitoring programs, a variety of equipment is necessary. This equipment includes highly specialized items such as boats, electrofisher, water chemistry meters, safety gear, scales, and many other important items.

2.4.3 Financial Implications of Flood Forecasting and Warning and Watershed Monitoring Equipment

Having reliable equipment is essential to being able to deliver QC’s programs and services. Equipment is shared amongst all departments and program areas to ensure QC maximizes the value of our equipment and reduces the financial burden on QC. Our inventory of equipment has a variety of life expectancies with most items ranging from a 2-year to 20-year life expectancy. Some of the more expensive assets such as boats, motors, tractors, etc. are rated on a 30-year life expectancy.

The risk associated with not replacing equipment include:

- Unreliable or lost data;
- High maintenance and repair costs;
- Disruption of service to residents and visitors;
- Increased maintenance and repair costs;
- Health and safety concern for public and staff;
- Liability concerns.

The financial implications are as follows:

2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
\$77,201	\$81,181	\$80,806	\$84,572	\$84,281	\$88,134	\$87,932	\$91,877	\$91,768	\$93,759

Annual Average
\$86,151

For budgeting purposes, the average replacement cost of \$86,151 will be incorporated into the 2024 budget onwards as a capital expense. This value includes a CPI adjustment over 10 years at a rate of 2.5% annually. Any part of the budget that is unspent in the current year is to be carried forward and placed in a reserve account to ensure we have the necessary funds to support the annual costs of Quinte Conservations equipment.



2.5 Water Management Infrastructure

Quinte Conservation owns, operates, and/or maintains 43 water management structures throughout the watershed. These structures range from historical remnants of an once functioning dam to seasonal weirs to large flood control structures. In 2018, Quinte Conservation contracted D.M. Wills Associates Ltd. to complete a Water Control Structure Condition Assessment. The purpose of the assessment focused on determining the priority capital projects for the next 10 years. As part of the work, each structure was inspected, and recommendations were provided. The recommendations focused on how to properly maintain the structure to ensure safe operation, public safety, and longevity.

In 2021, the Quinte Conservation Executive Board approved a motion (QC-021-079) directing staff to contact each of our municipal partners regarding the 10-year plan to allow each municipality benefitting from the water management structures to financially plan for capital maintenance into 2032.

Although the Water Management Infrastructure already has an approved capital asset management plan and payment schedule, it is important to recognize this plan as part of QC's overall Asset Management Plan. QC will also continue to keep the Water Management Infrastructure Plan as a separate special levy budget item because of the complexity around which municipalities are benefitting from each structure.

QC prepared this 10-year plan showing the cost increasing for the initial five years. The payment schedule started in 2022 on an annual basis by the benefitting municipalities and the funds are held in a reserve account specific for water management infrastructure capital maintenance.

The following list of dams and weirs are part of the water management infrastructure asset management plan and form an integral part of QC business:

Water Control Infrastructure	Main Function	Secondary Function
Arthur Holgate Dam	Ice Control Dam	Flood & Erosion Control
Belleville Yardmen Dam	Ice Control Dam	Flood & Erosion Control
Catons Weir	Recreational (Stoco Lake)	
Chapman's Weir	Recreational (Stoco Lake)	
Deerock Lake Dam	Flood & Erosion Control	Low Flow Augmentation
Deloro Dam	Water supply for Deloro Mine	
Downey's Weir	Recreational (Moirra Lake)	
Flinton Dam	Recreational and Water Supply	
George & Lois Wishart Dam	Ice Control Dam	Flood & Erosion Control
Harry Mulhall Dam	Ice Control Dam	Flood & Erosion Control
Lingham Lake Dam	Flood & Erosion Control	Low Flow Augmentation
Lott Dam	Ice Control Dam	Flood & Erosion Control
McLeod Dam	Hydro Electric Generation	Flood & Erosion Control
O'Hara Mill Dam	Recreational/Historic	
Skootamatta Lake Dam	Flood & Erosion Control	Recreation; Low Flow Augmentation
13 Island Lake	Recreation	Low Flow Augmentation
2nd Depot Lake	Flood & Erosion Control	
3rd Depot Lake	Flood & Erosion Control	
Bellrock Main Dam	Fire supply	Recreation
Bellrock Mill Dam	Recreational/Historic	
Breeze Dam	Flood & Erosion Control	
Colebrook Dam	Flood & Erosion Control	
Dead Creek Dam	Conservation/Wetland Preservation	
Hardwood Creek Dam	Historical	
James Lazier Dam	Flood & Erosion Control	
Kingsford Weir	Recreation - No longer installed	
Laraby Rapids Dam	Low Flow Augmentation	Recreation
Lower Arden Dam	Recreation	
Middle Arden Dam	Recreation	
Newburgh Weir	Fire supply	Recreation- no longer installed
Springside Park Dam	Municipal water intake	Recreation
Upper Arden Dam	Low Flow Augmentation	Recreation
Varty Lake Dam	Recreation	
Woods Dam	Historical/Recreation	
Beaver Meadow Dam	Conservation/Wetland Preservation	Recreation
Bloomfield Dam	Flood & Erosion Control	CWP/Recreation
Consecon Mill Dam	Flood & Erosion Control	Fire supply/LFA/Recreation
Demorestville Dam	Flood & Erosion Control	Fire supply
Harry Smith Dam	Conservation/Wetland Preservation	Recreation
Macaulay Mountain Dam	Flood & Erosion Control	Recreation
Milford Dam	Flood & Erosion Control	Fire supply/Recreation
Roblin Lake Dam	Low Flow Augmentation	Recreation
Whitney Dam	Flood & Erosion Control	LFA



2.5.1 Financial Implications of the Water Management Infrastructure

The risk associated with not replacing or maintaining our water control infrastructure include:

- Disruption of service to residents and visitors;
- Increased maintenance and repair costs;
- Health and safety concern for public and staff;
- Liability concerns;
- Risk to life and property.

The financial implications are as follows:

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
\$202,819	\$338,032	\$473,245	\$608,458	\$743,671	\$878,884	\$878,884	\$878,884	\$878,884	\$878,884

For budgeting purposes, the approved payment schedule for the Water Management Capital Plan will continue to be billed separately on an annual basis to the benefitting municipalities.

Conclusion

3.0 Conclusion

QC’s Asset Management Plan outlines a comprehensive approach to sustainably manage and maintain its physical and intangible assets. By prioritizing asset performance, risk management, and resource optimization, QC will enhance its operational efficiency, minimize lifecycle costs, and ensure the long-term sustainability of its environmental resources. Through continuous improvement and effective asset management practices, QC will continue to fulfill its vision of advancing watershed knowledge and collective actions to strengthen our natural ecosystems.

QC’s historical approach has been “reactive” to situations. This approach is problematic when a problem or need arises, QC requests funding from partner municipalities with little to no ability to plan for said funding nor time to apply for matching grant dollars. This plan not only creates a solid foundation for planning the future of QC but also allows QC to access provincial, federal, and private grants that occasionally become available.

The following is a summary table of the annual costs associated with the AMP that will be billed annually to our 18 member municipalities. An important note is that this is not additional financial support but reflects a similar dollar amount that was historically included in our operating budget. We have simply reorganized our budget so that it clearly accounts for capital expenditures. The total cost will be billed in accordance with the Current Value Assessment modified to the watershed boundary. This method is consistent with the way our operating budget is distributed. The values shown below exclude the Water Infrastructure Capital Asset Management information that was approved in 2020.

Asset Class	IT and IMS	Facilities and Lands	Vehicles	Flood Forecasting and Warning and Watershed Monitoring Equipment
Annual Cost	\$95,051	\$106,688	\$64,884	\$86,151
Total Cost	\$352,774			





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Quinte CONSERVATION

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Watershed Municipalities

City of Belleville
City of Quinte West
County of Prince Edward
Loyalist Township
Madoc Township
Municipality of Centre Hastings
Municipality of Marmora and Lake
Municipality of Tweed
Town of Deseronto
Town of Greater Napanee
Township of Addington Highlands
Township of Central Frontenac
Township of North Frontenac
Township of South Frontenac
Township of Stirling-Rawdon
Township of Stone Mills
Township of Tudor and Cashel
Township of Tyendinaga