Grey Sauble Conservation Authority

Watershed Based Resource Management Strategy

Draft Report for Consultion

October 23, 2024

PROTECT. RESPECT. CONNECT.
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Executive Summary

<< To be completed after consultation period >>

Approvals

The Watershed-based Resource Management Strategy (**"Watershed Strategy"**) for Grey Sauble Conservation Authority (GSCA) was developed following the Conservation Authorities Act and its regulations, and draft content from other Conservation Authorities.

The GSCA Board of Directors provided final review and approval on _____.

Land Acknowledgement

We acknowledge with respect, the history, spirituality, and culture of the Anishinabek: The People of the Three Fires known as Ojibway, Odawa, and Pottawatomi Nation, who have inhabited this land from time immemorial. And further give thanks to the Chippewas of Saugeen, and the Chippewas of Nawash, now known as the Saugeen Ojibway Nation, as the traditional keepers of this land. We also recognize, the Metis whose ancestors shared this land and these waters. May we all, as Treaty People, live with respect on this land, and live-in peace and friendship with all its diverse peoples.

Legislative Background

Conservation authorities are created under the Conservation Authorities Act, which was created by Ontario Legislature in 1946.

The Conservation Authorities Act, 1946, was legislated by the province of Ontario in response to concerns expressed by agricultural, naturalist and sports groups who highlighted that much of the renewable natural resources of the province were in an unhealthy state because of poor land, water and forestry practices during the 1930s and 1940s.The combined impacts of drought and deforestation led to extensive soil loss and flooding.

A particular milestone in Conservation Authority history was the impact of the devastating Hurricane Hazel flood event in 1954. Following the Hurricane Hazel event the provincial government amended the Conservation Authorities Act to enable conservation authorities to acquire lands for recreation and conservation purposes, and to regulate that land for the safety of the community.

Today the purpose of the Act is to provide for the organization and delivery of programs and services that further the conservation, restoration, development and management of natural resources in watersheds in Ontario.

The objects of an authority are to provide, in the area over which it has jurisdiction,

a) The mandatory programs and services required under Section 21.1 of the Act,

b) Any municipal programs and services that may be provided under Section 21.1.1 of the Act, and,

c) Any other programs or services that may be provided under Section 21.1.2 of the Act.

Conservation authorities are created when two or more municipalities sharing a watershed, petition the Minister of Natural Resources and Forestry to establish a conservation authority. In the beginning (1946), the Act stipulated that the costs of projects should be shared by municipalities and by the provincial government. This division of costs has changed over time and now the GSCA self-funds more than fifty percent of the revenues of the Authority. Most of the remaining funding is provided through municipal contributions.

The Grey Sauble Conservation Authority was established in 1985 through the amalgamation of the North Grey Region Conservation Authority (est. 1957) and the Sauble Valley Conservation Authority (est. 1958). The GSCA is a community-based, environmental organization dedicated to conserving, restoring, developing and managing renewable natural resources on a watershed basis. It is one of 36 conservation authorities (CAs) in Ontario, governed by a Board of Directors comprised elected officials from its eight member municipalities.

Ontario Regulation (O. Reg.) 687/21 and Sections 21.1.1 and 21.1.2 of the Conservation Authorities Act established a requirement for Transition Plans, an Inventory of Programs and Services, and Agreements to carry out certain Category 2 and Category 3 programs and services.

O. Reg. 686/21 sets out the mandatory programs and services which must be delivered by conservation authorities in Ontario. Specifically, section 12(1)3 of the regulation requires all conservation authorities to prepare a "Watershed-based Resource Management Strategy" ("**Watershed Strategy**").

The legislation requires that the Watershed Strategy include Category 1 programs and services provided by the CA. It may also include both Category 2 and Category 3 programs and services, where the relevant agreements permit the inclusion of these programs or services in the Watershed Strategy. Sections 12(4)-(7) of O. Reg. 686/21 set out the required components to be included in the Watershed Strategy.

Required components

12. (1) An authority shall provide the following programs and services in accordance with paragraph 2 of subsection 21.1 (1) of the Act:

> 3. Programs and services to support the authority's functions and responsibilities related to the development and implementation of a watershed-based resource management strategy on or before December 31, 2024, in accordance with subsection (4).
>
> (4) The watershed-based resource management strategy referred to in paragraph 3 of subsection (1) shall include the following components:
>
> 1. Guiding principles and objectives that inform the design and delivery of the programs and services that the authority is required to provide under section 21.1 of the Act.
>
> 2. A summary of existing technical studies, monitoring programs and other information on the natural resources the authority relies on within its area of jurisdiction or in specific watersheds that directly informs and supports the delivery of programs and services under section 21.1 of the Act.
>
> 3. A review of the authority's programs and services provided under section 21.1 of the Act for the purposes of,
>
> i. determining if the programs and services comply with the regulations made under clause 40 (1) (b) of the Act,
> ii. identifying and analyzing issues and risks that limit the effectiveness of the delivery of these programs and services, and
> iii. identifying actions to address the issues and mitigate the risks identified by the review and providing a cost estimate for the implementation of those actions.

4. A process for the periodic review and updating of the watershed-based resource management strategy by the authority that includes procedures to ensure stakeholders, and the public are consulted during the review and update process.

(5) Subject to subsections (6) and (7), a watershed-based resource management strategy may include programs and services provided by the authority under sections 21.1.1 and 21.1.2 of the Act.

(6) If, in respect of programs and services the authority provides under subsection 21.1.1 (1) of the Act, a memorandum of understanding or other agreement is required, a watershed-based resource management strategy may not include those programs and services unless the memorandum of understanding or other agreement includes provisions that those programs and services be included in the strategy.

(7) If, in respect of programs and services the authority provides under subsection 21.1.2 (1) of the Act, an agreement is required under subsection 21.1.2 (2), a watershed-based resource management strategy may not include those programs and services unless the agreement includes provisions that those programs and services be included in the strategy.

(8) The authority shall ensure stakeholders, and the public are consulted during the preparation of the watershed-based resource management strategy in a manner that the authority considers advisable.

(9) The authority shall ensure that the watershed-based resource management strategy is made public on the authority's website, or by such other means as the authority considers advisable.

GSCA Overview

The Grey Sauble Conservation Authority (GSCA) conserves and nurtures the natural environment, protects people and property from natural hazards, and inspires stewardship and environmental awareness within local communities. With a team of over 30 full-time, part-time, contract, and seasonal staff, GSCA delivers vital conservation work across the region through essential programs and services that protect and enhance a healthy watershed.

The Grey Sauble watershed is complex and includes fiver major rivers and numerous smaller tributaries, spanning all or part of eight local municipalities. As such, delivering services with an integrated approach across the entire watershed is crucial to upholding clean water, safe communities, access to environmental education and recreation opportunities, and healthy forests and wetlands for all to enjoy.

Within this expansive area, GSCA owns and manages over 11,000 hectares of some of the most scenic and environmentally sensitive lands in Grey and Bruce Counties and delivers programs and services throughout its 3100 square kilometre watershed boundary. GSCA's value to this entire watershed community is delivered through the suite of programs and services detailed within this report. The employees championing these programs and services uphold GSCA's mandate and support the vision and mission of the organization.

Guiding Principles

The Grey Sauble Conservation Authority is guided by its Vision and Mission statements.

Vision:

A healthy watershed environment in balance with the needs of society.

Mission:

In partnership with the stakeholders of the watershed, is to promote and undertake sustainable management of renewable natural resources and to provide responsible leadership to enhance biodiversity and environmental awareness.

At the time of the writing of this report, GSCA is undergoing a revision of its strategic plan and the Vision and Mission statements of the organization. The Vision and Mission soon will be determined by the Board of Directors as one of the two following options.

Vision:

A sustainable, healthy and safe community through conservation.

OR

A vibrant watershed, supported by GSCA, where ecosystems thrive, and communities are healthy, safe, and prosperous.

Mission:

To champion a healthy and safe watershed through innovative conservation efforts, sound planning, and inspiring initiatives, now and in the future.

OR

To implement sustainable practices, promote environmental awareness, and collaborate with stakeholders to create a healthier, safer and more vibrant community.

Objectives

Based on Grey Sauble Conservation Authority's 2025-2035 Strategic Plan, the objectives under which the Authority operates are as follows:

1. To **effectively monitor and manage the risk of natural hazards** by implementing strategies to identify, assess, and mitigate the impact of natural hazards on our communities associated with flooding, erosion, and dynamic beaches.

2. To **enhance GSCA land management** through the implementation of sustainable land management practices, conservation efforts, and community involvement as key components of achieving this objective. This may include initiatives to improve environmental sustainability, biodiversity conservation, and community engagement. This objective is intended to ensure that land is managed efficiently and responsibly, considering factors such as ecological health, economic viability, and social well-being.

3. Striving to **achieve organizational excellence** in performance, innovation, customer satisfaction, employee engagement, and ethical practices. It requires a holistic approach to organizational development, striving for continuous improvement and adaptability to changing natural, social and political environments. Achieving organizational excellence involves enhancing service quality, fostering a positive organizational culture, embracing innovation, and maintaining strong ethical standards.

4. To **improve watershed health** by enhancing the overall well-being of the watershed through monitoring water resources, promoting conservation, and engaging communities in stewardship for sustainable water resources.

5. **Strengthening environmental education and communication** by providing better awareness and understanding of environmental issues and fostering proactive environmental stewardship. This will include implementation our

Environmental Education Framework which guides the development and implementation of educational programming centred around GSCA environmental expertise. This will include execution of our Environmental Education Framework which guides the development and implementation of educational programming centred around GSCA environmental expertise.

GSCA Historical Background

Conservation authorities are local environmental agencies that undertake a broad range of programs for watershed management. For more than 70 years, conservation authorities in Ontario have protected and restored resources in their watersheds using a science-based approach. Conservation authorities work in partnership with all levels of government, agricultural and rural organizations, environmental groups, landowners, businesses and residents to ensure the proper management of land and water resources. Areas of expertise and service include watershed management, water quality and quantity management, flooding and erosion, afforestation, natural heritage, recreation, environmental education, and agriculture and rural landowner assistance.

Grey Sauble Conservation Authority (GSCA) was established in 1985 through the amalgamation of the North Grey Region Conservation Authority (est. 1957) and the Sauble Valley Conservation Authority (est. 1958). The GSCA's vision is "*a healthy watershed environment in balance with the needs of society*" and its mission "*in partnership with stakeholders of the watershed, to promote and undertake sustainable management of renewable natural resources and to provide responsible leadership to enhance biodiversity and environmental awareness*" (GSCA, 2005).

For over 60 years, the mandate of the Grey Sauble Conservation Authority (GSCA) was to provide programs and services that further the conservation, restoration, development and management of natural resources, except for oil and gas. With recent changes to the Conservation Authorities Act (CAA), the mandate of the GSCA is now to provide mandatory programs and services, any municipal services that may be provided under agreement with a municipality, and any other programs and services that the Board of Directors deems advisable.

The mandatory programs of the GSCA include:

- Programs and services related to the risk of natural hazards.
- Programs and services related to the conservation and management of lands owned or controlled by the authority, including any interests in land registered on title.
- Programs and services related to the Authority's duties, functions and responsibilities as a source protection authority under the Clean Water Act, 2006.
- Programs and services related to the Authority's duties, functions and responsibilities under an Act prescribed by regulation.
- Other programs and services prescribed by regulation.

Flood damage prevention involves ensuring that new development is placed outside the floodplain. Flood protection is implemented through capital projects and maintenance of channels to alleviate the effects of flooding on existing structures. Significant flooding events occurred in 1947, 1948, 1967 and 1977. GSCA operates and maintains several water control structures as part of its comprehensive water management program, including a flood forecasting network. In addition to its two flood control structures,

Clendenan Dam and Taylor Street Detention Pond, the Authority owns and operates eight other water control structures, such as the Mill Dam in Owen Sound. These dams serve a variety of functions including recreation, wildlife habitat, and fisheries management. Several have local historical significance.

Six major erosion control projects have been constructed by GSCA, in partnership with the Province and member municipalities, along with numerous smaller ones, at various locations across the watershed. The GSCA continues to monitor and maintain these projects on an annual basis.

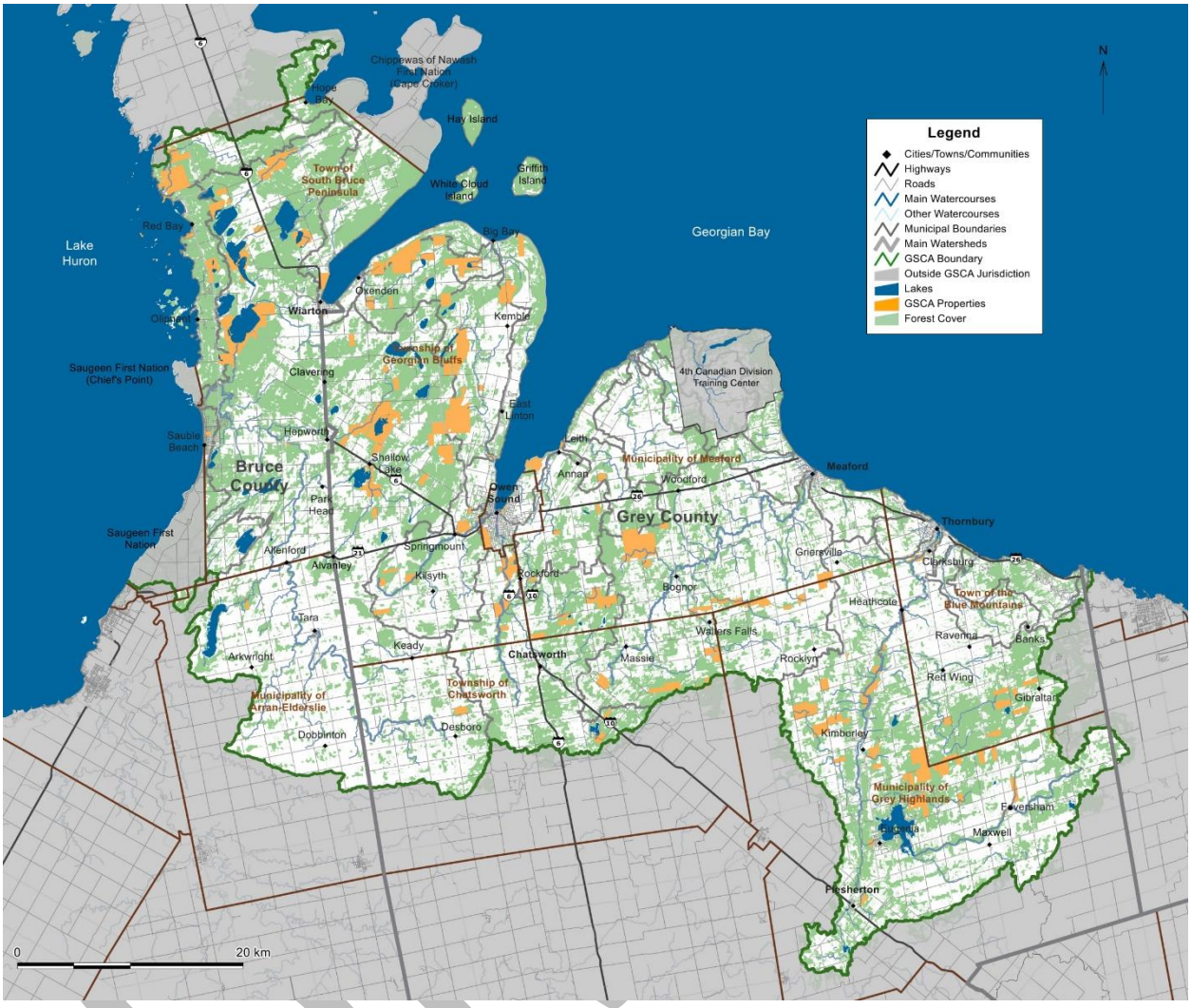
The Saugeen Valley Conservation Authority borders the southern edge of GSCA's watershed boundary, and the Nottawasaga Valley Conservation Authority borders the eastern edge of the GSCA's watershed. The jurisdictional boundaries between authorities are marked by the height of land that separates one watershed from another.

There is a history of cooperative activities between these adjacent conservation authorities and this approach will continue to be important to meet the needs of our watershed communities into the future. Examples of collaborative projects between neighbouring Conservation Authorities include Healthy Futures from GSCA and SVCA, the Grey-Bruce Forestry Services program of GSCA and SVCA, the past environmental education initiatives that included DEER, WREN and World of Trees and the Envirothon.

Conservation Ontario is the provincial association of Conservation Authorities and plays a coordinating role to assist Ontario's conservation authorities. Regular meetings, workshops and working group activities are used to co-create standards and to share experience and approaches across the provincial network.

Conservation Authorities within Ontario

GSCA Watershed Jurisdiction



Physical Watershed Characterization

GSCA has a watershed area of 3,191 square kilometres inland from Lake Huron and Georgian Bay. With the waterward extents, 5km into Lake Huron and Georgian Bay, the total watershed jurisdiction is 4174 square kilometres.

- Total length of shoreline – approximately 185 km
- Population – approximately 68,395
- Length of trails on GSCA properties – 172 km
- 37% of Bruce Trail is within GSCA's jurisdiction
- 87km of Bruce Trail runs across GSCA properties
  - 54km of this is the main or white trail

GSCA jurisdiction is composed of five main watersheds, the Sauble, the Pottawatomi, the Sydenham, the Bighead and the Beaver Rivers.

The Sauble River, with the largest catchment area in the GSCA jurisdiction, drains into Lake Huron. The other four large watersheds drain into Georgian Bay. These watersheds are the Beaver, Bighead, Sydenham and Pottawatomi Rivers. In addition, there are several significant smaller watercourses draining into Georgian Bay, including Indian Brook, Little Beaver Creek, Centreville Creek, Sucker Creek (Meaford), Johnston Creek, Keefer Creek, Bothwell's Creek, Indian Creek, Big Bay Creek and Gleason Brook. The significant watercourses draining into Lake Huron are Sucker Creek (South Bruce Peninsula) and Stoney Creek. There are also long stretches of lake fringe areas with watersheds that drain directly into Georgian Bay or Lake Huron

Table 1 – River Systems within GSCA Watershed

Subwatershed	*Area of Sub-watershed (km^2)*	*Elevation at Headwaters (masl)*	*Elevation at Mouth (masl)**	*Change in Elevation (m)*	*Length of Stream (km)*	*Slope of Stream (m/km)*
Grey Sauble SPA						
Beaver River	617.5	510.1	176.0	334.1	76.1	4.4
Big Bay Creek	9.3	230.0	176.0	54.0	3.7	14.7
Bighead River	350.9	321.0	176.0	145.0	52.6	2.8
Bothwell's Creek	63.1	265.0	176.0	89.0	14.2	6.3
Gleason Brook	44.9	242.2	176.0	66.2	21.3	3.1
Indian Brook	34.0	473.4	176.0	297.4	16.5	18.0
Indian Creek	81.1	230.0	176.0	54.0	14.2	3.8
Johnson Creek	19.0	298.1	176.0	122.1	12.0	10.2
Keefer Creek	38.8	287.5	176.0	111.5	13.7	8.1
Little Beaver River	14.4	356.5	176.0	180.5	6.5	27.7
Orchard Creek	14.1	324.9	176.0	148.9	10.1	14.8
Pottawatomi River	113.2	244.3	176.0	68.3	18.4	3.7
Rankin River	221.8	205.1	180.1	25.1	21.7	1.2
Sauble River	692.8	244.5	176.0	68.5	86.1	0.8
Stoney Creek	31.2	218.5	176.0	42.5	15.1	2.8
Sucker Creek (S. Bruce Peninsula)	46.4	205.5	176.0	29.5	15.5	1.9
Sucker Creek (Meaford)	36.7	304.1	176.0	128.1	14.5	8.9
Sydenham River	198.7	322.7	176.0	146.7	40.9	3.6
Waterton Creek	57.1	352.8	176.0	176.8	20.8	8.5

The extensive river systems of the GSCA, and the lands adjacent to them, are home to a diverse and abundant variety of plant and animal species. The zones where water meets land, the riparian zones, are of particular importance, as these areas can be among the richest and most productive ecological zones within a watershed. The riparian zone protects a river by providing a buffer between the river and the intensively used urban and farmland on which much of our economy depends. They also protect people and property by keeping floodplain land intact. Riparian zones are ecological water users. The health and extent of all the plant and animal components of these zones rely on the water. A better quality of water available to the species within these zones makes for healthier riparian zones. Like the riparian zones along our shorelines, the wetlands throughout the watershed region are also important ecological features and an ecological water user. They provide habitat for an array of plants and animals. Wetlands play a role in preventing floods and droughts and improve the quality of water.

There are few coastal marshes in the GSCA, except for the Howdenvale and Oliphant areas. The Lake Huron and Georgian Bay shorelines in general are exposed to wave action and do not afford the shallow and sheltered waters that promote marsh development. Lacustrine marshes are located along the margins of many lakes in the GSCA, such as: Eugenia Lake Wetland (287-hectare marsh); Arran Lake Wetland (390 ha marsh); McNab Lake Wetland north of Shallow Lake (205 ha marsh); and the Mountain Lake-Skinners Marsh Complex, also north of Shallow Lake (370-hectare marsh). The largest marshland in the GSCA is the Rankin River Wetland northeast of Sauble Beach, of which 60 percent or 1639 hectares is classified as marsh and the remainder as swamp.

One of the dominant natural features within GSCA boundaries is the Niagara Escarpment. Steep hills rise more than 200 metres at the Blue Mountains, while other sections have sheer cliffs up to 60 metres high that make for spectacular lookouts. The escarpment stays close to the Georgian Bay shoreline as it winds its way through the region from Collingwood through Owen Sound and northward on the Saugeen Bruce Peninsula to Tobermory. Exceptions are the deep re-entrant valleys of the Beaver, Bighead and Sydenham Rivers that extend southward for several kilometres. The coastal fringe along Lake Huron is relatively flat and generally less than 220 metres above sea level. Central and eastern parts of GSCA's watershed area have lightly to heavily rolling terrain. The Bruce Peninsula consists of a rugged, bedrock plain dominated by the stark cliffs of the Niagara Escarpment along the Georgian Bay side. On the west side of the Peninsula, the land slopes very gradually toward Lake Huron. The Lake Huron coast is highly indented and numerous small islands and shoals are located offshore. Bedrock consists mainly of carbonate, limestone and dolostone, rocks, as well as some shale units that are interbedded with the limestone and dolostone. Dolostone is a hard, resistant rock and differs from limestone in that some of the calcium ions have been replaced by magnesium. The presence of dolostone promotes

the formation of vertical cliffs and waterfalls as it acts to shield softer, underlying layers of rock from erosion. Extensive areas of karst occur within the watershed. The Niagara Escarpment has several large karst areas, such as near the ski hills in The Blue Mountains; along the Beaver Valley; south of Meaford; between Meaford and Owen Sound; and to the south and north of Owen Sound. Other karst areas can be found near Shallow Lake, Walter's Falls and west of Kolapore.

Municipalities within the Watershed

The Grey Sauble watershed area overlaps the jurisdictions of eleven lower tier and three upper tier municipalities. Of these fourteen, eight municipalities are considered participating municipalities that contribute to the funding of the Authority. As per the Conservation Authorities Act (CAA), the funding contributions of the participating municipalities are based on the modified current value assessment (MCVA) provided to the GSCA by the Province. The GSCA is governed by a Board of Directors. The Board of Directors is made up of elected officials from each participating municipality. The number of elected officials representing each municipality on the Board of Directors is determined by population, as per the CAA. Upper tier municipalities are not deemed to be participating municipalities within the CAA.

The following municipalities are within GSCA's watershed jurisdiction:

The Municipality of Arran-Elderslie

The Municipality of Arran-Elderslie is in the south-western portion of the GSCA watershed area with approximately 52 percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within Saugeen Valley Conservation Authority's jurisdiction. The municipality has a population of approximately 6,900 residents.

The Municipality of Arran-Elderslie is a participating municipality and contributes approximately 2.7 percent of GSCA's levy. The Township currently has one elected official serving on GSCA's Board of Directors.

The Town of the Blue Mountains

The Town of the Blue Mountains is in the north-eastern portion of the GSCA watershed area with approximately 84 percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within Nottawasaga Valley Conservation Authority's jurisdiction. The municipality has a population of approximately 9,400 residents.

The Town of the Blue Mountains is a participating municipality and contributes approximately 28.4 percent of GSCA's levy. The Town currently has one elected official servicing on GSCA's Board of Directors.

The Township of Chatsworth

The Township of Chatsworth is in the south-central portion of the GSCA watershed area with approximately 51 percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within Saugeen Valley Conservation

Authority's jurisdiction. The municipality has a population of approximately 7,100 residents.

The Township of Chatsworth is a participating municipality and contributes approximately 3.1 percent of GSCA's levy. The Township currently has one elected official serving on GSCA's Board of Directors.

The Township of Clearview

The Township of Clearview is located to the far east of the GSCA watershed area with less than one percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within Nottawasaga Valley Conservation Authority's jurisdiction.

The Township of Clearview is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

The Town of Collingwood

The Town of Collingwood is located to the far northeast of the GSCA watershed area with approximately five percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within Nottawasaga Valley Conservation Authority's jurisdiction. The municipality has a population of approximately 24,800 residents.

The Town of Collingwood is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

The Township of Georgian Bluffs

The Township of Georgian Bluffs is in the north-central portion of the GSCA watershed area with 100 percent of the municipality within GSCA's jurisdiction. The municipality has a population of approximately 11,100 residents.

The Township of Georgian Bluffs is a participating municipality and contributes approximately 12.8 percent of GSCA's levy. The Township currently has two elected officials serving on GSCA's Board of Directors.

The Municipality of Grey Highlands

The Municipality of Grey Highlands is in the south-eastern portion of the GSCA watershed area with approximately 60 percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is within both the Saugeen

Valley Conservation Authority's jurisdiction and the Nottawasaga Valley Conservation Authority's jurisdiction. The municipality has a population of approximately 10,400 residents.

The Municipality of Grey Highlands is a participating municipality and contributes approximately 8.4 percent of GSCA's levy. The Municipality currently has one elected official serving on GSCA's Board of Directors.

The Municipality of Meaford

The Municipality of Meaford is in the north-central portion of the GSCA watershed area with 100 percent of the municipality within GSCA's jurisdiction. The municipality has a population of approximately 11,500 residents.

The Municipality of Meaford is a participating municipality and contributes approximately 13.5 percent of GSCA's levy. The Municipality currently has two elected officials serving on GSCA's Board of Directors.

The Municipality of Northern Bruce Peninsula

The Municipality of Northern Bruce Peninsula is located to the north of the GSCA watershed area with approximately two percent of the municipality within GSCA's jurisdiction. The remaining portion of the municipality is not within a conservation authority's jurisdiction. The municipality has a population of approximately 4,400 residents.

The Municipality of Northern Bruce Peninsula is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

The City of Owen Sound

The City of Owen Sound is in the north-central portion of the GSCA watershed area with 100 percent of the municipality within GSCA's jurisdiction. The municipality has a population of approximately 21,600 residents.

The City of Owen Sound is a participating municipality and contributes approximately 17.7 percent of GSCA's levy. The City currently has two elected officials serving on GSCA's Board of Directors.

The Town of South Bruce Peninsula

The Town of South Bruce Peninsula is in the north-western portion of the GSCA watershed area with 100 percent of the municipality within GSCA's jurisdiction. The municipality has a population of approximately 9,100 residents.

The Town of South Bruce Peninsula is a participating municipality and contributes approximately 13.5 percent of GSCA's levy. The Town currently has one elected official serving on GSCA's Board of Directors.

The County of Bruce

The County of Bruce is in the western portion of the GSCA watershed area and encompasses the entirety of the Lake Huron shoreline within the watershed.

The County of Bruce is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

The County of Grey

The County of Grey is in the eastern portion of the GSCA watershed area and encompasses most of the Georgian Bay shoreline within the watershed.

The County of Grey is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

The County of Simcoe

The County of Simcoe is in the far eastern portion of the GSCA watershed area and only accounts for a very small portion of the watershed.

The County of Simcoe is not a participating municipality, does not contribute to GSCA's levy, and is not represented on the GSCA Board of Directors.

Indigenous Communities, Territories and Treaties

The GSCA's jurisdiction encompasses the Traditional territory and Treaty areas relating to the Saugeen Ojibway Nation (SON). SON is comprised of two First Nations, the Chippewas of Saugeen First Nation and the Chippewas of Nawash Unceded First Nation, with a shared history and ancestry. The Traditional Lands or Territory of SON includes over 2 million acres in Southwestern Ontario, as well as the surrounding lakebed.

Through a series of treaties in the 1800's, much of these traditional lands were ceded to the Crown. The treaty making process in Ontario began during the 1700s and continued through to the twentieth century. However, most of the treaties relevant to the GSCA watershed area occurred between 1818 and 1899.

The treaties most relevant to the GSCA watershed area are:

- Treaty 18: The Lake Simcoe - Nottawasaga Treaty, 1818.
- Treaty 45 ½: The Saugeen Treaty, 1836.
- Treaty 67: The Half-Mile Strip Treaty, 1851.
- Treaty 72: The Saugeen Peninsula Treaty, 1854.
- Treaty 82: The Owen Sound or Nawash Treaty, 1857.
- Treaty 93: The Colpoy's Bay Treaty, 1861.
- Various: The Islands Treaties, 1885-1899

The Lake Simcoe-Nottawasaga Treaty, or Treaty 18, was made between the Chippewa near Lake Simcoe (the current Chippewa of Rama First Nation, Chippewas of Beausoleil First Nation, and the Chippewas of Georgina Island) and the colonial government of Upper Canada. On October 17, 1818, Indigenous leaders including Chief Musquakie, and colonial officials met near the Holland River in the Township of King to negotiate and sign the treaty. Treaty 18 outlines the surrender of 1,592,000 acres of land, encompassing current-day communities such as Collingwood, Thornbury and Meaford. (https://grasac.artsci.utoronto.ca/?p=2211)

Within the GSCA watershed area, Treaty 18 relates to an area from the northern point of the Municipality of Meaford, that approximately coincides with the Sydenham – St. Vincent divide, south through the present-day communities of Markdale and Priceville.

The Saugeen Treaty (Treaty No. 45 ½) of 1836 consisted of the surrender of 1.5 million acres by SON in exchange for economic assistance and protection from settler encroachment. At the time, the British promised the SON that they would protect the Indigenous peoples residing on the Saugeen Peninsula and that it would be protected for their use. However, 18 years later the Crown claimed that they could not protect these lands unless another treaty was negotiated. Consequently, this resulted in the

Saugeen Peninsula Treaty or Treaty 72 in 1854, which ceded 500,000 acres of the Saugeen Peninsula to the Crown.

Other treaties that followed include: the Half-Mile Strip Treaty (Treaty 67) of 1851 for a road allowance from Southampton to Owen Sound; The Owen Sound or Nawash Treaty (Treaty 82) of 1857; The Colpoy's Bay Treaty (Treaty 93) of 1861; and the 1885-1899 Islands Treaties, including the surrender of the Fishing Islands, Cape Hurd Islands, Griffith Island, Hay Island and White Cloud Island.

In 1968, approximately 90 fishing islands in Lake Huron were returned to the SON. What remains today of the Saugeen territory are the villages of Saugeen, Neyaashiinigmiing at Cape Croker, the hunting grounds north on the peninsula near Tobermory, and recently returned lands near Mountain Lake in the Township of Georgian Bluffs.

Source Protection Area

The Grey Sauble Source Protection Area is part of the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region (SPR). The Saugeen, Grey Sauble, Northern Bruce Peninsula SPR consists of three Source Protection Areas (SPA): Saugeen Valley SPA; Grey Sauble SPA; and Northern Bruce Peninsula SPA. The Source Protection Areas and Region were established under the *Clean Water Act, 2016* by *O. Reg. 284/07*.

The Grey Sauble Conservation Authority Board sits as the Source Protection Authority in the Grey Sauble SPA. The Saugeen Valley Conservation Authority Board sits as the Source Protection Authority in the Saugeen Valley SPA and the Municipality of Northern Bruce Peninsula Council sits as the Source Protection Authority in the Northern Bruce Peninsula SPA. The three agencies have representatives on a Management Committee that helps to oversee the technical and financial aspects of the Drinking Water Source Protection work within the SPR.

The SPR represents approximately 8400 square kilometers and has approximately 175,000 residents. The area is very diverse with two Conservation Authorities, two First Nations and 21 lower-tier municipalities. Activities by provincial, federal, and non-governmental organizations are prevalent within the region as well. The physical characteristics of the region are equally as varied. The climate is greatly influenced by Lake Huron, which includes Georgian Bay. Prominent features include the Niagara Escarpment, karst topography, various types of wetlands, and several major river systems, to name a few.

Three other Source Protection Regions share a boundary with the Saugeen, Grey Sauble, Northern Bruce Peninsula SPR. To the south is the Ausable Bayfield Maitland Valley SPR, while to the east are the Lake Erie SPR and the South Georgian Bay Lake Simcoe SPR.

Category 1 Programs and Services

Conservation Lands Management

GSCA has been actively protecting the natural landscape of Grey and Bruce Counties for over 60-years through property acquisition and sustainable land management efforts.

Grey Sauble Conservation Authority (GSCA) owns 11,755 hectares (29,048 acres) of land in Grey and Bruce Counties making GSCA the owner and manager of the largest amount of publicly accessible land in the watershed. GSCA lands have been divided into four classifications based on the primary types of activities that are engaged in on each parcel of land and other matters of significance related to the parcel and the needs of this Authority, which include:

- High use conservation areas,
- Lower use conservation areas,
- Resource management and non-public nature preserves, and,
- Leased lands.

These 207 property parcels, or 80 groupings, are comprised of sensitive landscapes, such as shorelines, wetlands, Areas of Natural and Scientific Interest (ANSI) and old growth forests, providing much needed refuge for flora and fauna, some of which are rare. GSCA landholdings are a major contributor to natural heritage systems in the region.

A 2018 preliminary evaluation of GSCA's landholdings determined that over 86-million dollars (2024-dollar value) of ecosystem service benefits are provided annually to residents and visitors by these properties. These ecosystem services include recreation opportunities, flood and drought mitigation, climate regulation, wildlife benefits, carbon sequestration, and others. A copy of this report can be found on GSCA's website: The Value of our Natural Areas.

In addition to the ecological benefits, GSCA lands boast 172 km of trails for outdoor recreation including hiking, walking, skiing, snowshoeing and in some areas cycling and snowmobiling. Public access to these properties contributes significantly to the physical and mental wellbeing of the local population and those visiting from other areas, with over 300,000 visitors annually.

Over 6,400 ha (16,000 acres) of GSCA owned and managed land are considered appropriate for forest management activities.

Several GSCA properties also host cultural heritage features and historical assets, such as the former water filtration plant at Inglis Falls, the power plant ruins at Eugenia Falls and the McNeill estate ruins at Spirit Rock. There is still much work to be done to

understand the cultural significance GSCA properties have for local Indigenous peoples.

The diversity of recreational, natural heritage and ecological, historic and cultural heritage resources, and water and erosion control infrastructure on GSCA properties offer endless opportunities for research, education and recreation.

Service areas under the Conservation Lands Management program include the following:

- Forest management

  GSCA provides sustainable forest management activities on GSCA lands. The responsible and sustainable management of these forests helps to ensure that the GSCA watershed benefits from increased and improved wildlife habitat, ecosystem health, improved water quality and vibrant outdoor recreation opportunities. The forests are managed on a sustainable, long-term basis, ensuring the longevity of the many values that forests provide. Registered Professional Foresters, on staff at GSCA, have developed a Forest Management Plan for GSCA properties. This plan has identified many objectives including conservation and protection of watershed headwaters, the protection of heritage features, both natural and cultural, the maintenance and enhancement of wildlife habitat features and for recreational use.

  Forests are managed to mimic local natural disturbances and to create suitable habitat and conditions for the trees to regenerate. In the GSCA watershed, forests naturally developed through small-scale disturbances such as windstorms and lightning strikes. As such, GSCA attempts to emulate these small-scale disturbances by removing individual trees throughout the forest, instead of large areas of trees. By creating small openings in the forest, suitable microsite conditions are created to allow for desired species to regenerate and replace the trees that have been removed. Through forest management activities, GSCA is able to offset some of the cost of providing the overall management goals and activities.

  Forests are managed on a long-term time horizon for the benefit of future generations. Guidelines have been developed using the latest scientific research. These guidelines provide GSCA with direction to best manage these forests. These guidelines are reviewed frequently, as new research and information becomes available. GSCA follows this same approach by creating a forest management plan, implementing the plan, reviewing the outcomes and adapting future management with what was learned.

  Emerald ash borer is an invasive pest that burrows into all species of ash trees and causing a health decline that leads to the death of the tree. This invasive species is widespread throughout the watershed and has caused substantial damage to the

forests on GSCA's properties. This is leading to issues with risk management for recreational trails.

- Passive recreational uses and infrastructure
  With over 172 kilometres of trail, several beach properties, and some of the most stunning vistas within the watershed, recreational uses and tourism are very popular activities on GSCA properties, with over 300,000 visitors annually. Although this popularity provides many opportunities for GSCA, it also brings many challenges. Some of the challenges facing this program area include the high cost of capital investment and replacement, appropriate visitor management, and increased risk management. As noted under Forest Management, the advance of emerald ash borer in recent years is causing substantial die off of ash trees on GSCA properties. This increase in dead trees is dramatically increasing hazard tree concerns for GSCA's trail network.

- Policy development
  GSCA utilizes a suite of policy and procedure documents to ensure that decisions are made in a consistent manner to meet the land management objectives of the Authority. It is important that these documents are designed to meet these objectives and that there is a process in place to continuously assess the effectiveness and appropriateness of these documents.

- Property management, maintenance and inspections
  These services include ensuring that GSCA's properties are managed in a sustainable way, ensuring that infrastructure and public access areas are well maintained, and conducting inspections to ensure that issues are identified and remedied in a timely manner.

- Section 29 compliance
  Ontario Regulation 668/21, made under Section 29 of the Conservation Authorities Act sets out the rules of conduct for conservation areas. Additionally, under the Trespass to Property Act, GSCA sets permitted uses that are consistent with O.Reg. 668/21 and with the objectives of the Authority. GSCA staff utilize a variety of tools, including education and enforcement, to encourage compliance with Section 29 of the Conservation Authorities Act.

The primary issues associated with the broader Conservation Lands program is the lack of sufficient resources to fully implement the program. Capital asset needs are oversubscribed when compared against the Lands Reserve. Staff in this program area are challenged by high workloads associated with improving visitor experience, managing and maintaining infrastructure, managing ecosystem health, managing land-use agreements, and strategically planning for the future.

This limited staffing and financial capacity impacts the ability of staff to fully manage all GSCA forested properties. Staff work to complete inspections on properties as needed and as available but detailed inspections of each property is not feasible. GSCA's properties are also facing the threat of invasive species which are causing negative impacts on the environment. Controlling and eradicating invasive species on GSCA lands will be nearly impossible without a broader plan to control invasive species within the broader GSCA watershed. Invasive species control work on GSCA lands is also limited by staffing and financial resources. Revenue from timber sales from GSCA's properties have declined due to reduced harvest volumes.

Partnering with volunteer groups provides substantial benefit to GSCA and the lands that GSCA manages.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

- Eugenia Falls Management Plan, 2024
- Inglis Falls Management Plan, 2023
- Forest Management Plan, 2018
- GSCA High Conservation Value Forest Report, 2018
- Forest Management Policy, 2017
- Silvicultural Guide for Northern White-Cedar, 2012
- A land manager's guide to conserving habitat for forest birds in southern Ontario, 2011
- Ontario Tree Marking Guide, 2004
- A Silvicultural Guide to Managing Southern Ontario Forests, 2000
- Inglis Falls Master Plan, 2000
- Interpretive Strategies, 1992
- Inglis Falls Master Plan, 1980
- Hibou Master Plan, 1979

Additional Costs to Address Risks/Issues for Conservation Lands*

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (1 Forestry Tech)	$85,000
Increased Staffing Need (1 Lands Tech)	$85,000
Increased Staffing Need (1.5 Operations)	$97,500
Materials and Supplies	$13,000
Contracts and Services	$3,500
Capital Replacement	$119,000
New Capital (as per Mgmt Plans)	$36,500
Total	**$439,500**

* These costs do not include addressing invasive species or addressing ash trees

Additional Costs to Address Invasive Species and Ash Trees on Conservation Lands

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (1 Lands Tech)	$85,000
Increased Staffing Need (2 Arborists)	$140,000
Materials and Supplies	$7,000
Total	**$232,000**

Dam Management (Non-Flood Related)

In addition to managing flood and erosion control structures for the safety of the communities within the GSCA watershed, GSCA also manages several additional dam structures to help maintain the ecological and recreational value of both GSCA properties and other areas throughout the watershed. Management of these structures requires GSCA to understand systems and watersheds in which these structures are operated and requires ongoing and timely communication with relevant partners and stakeholders.

The dam structures in GSCA's ownership vary in age. The dams that are deemed to be non-flood control structures are utilized to enhance natural heritage and/or recreational uses on or adjacent to GSCA properties.

As this infrastructure ages, varying levels of repairs are needed demanding staff time, materials and financial inputs. The ongoing maintenance of these structures puts additional strain on already thin staffing resources.

The overall risk associated with these structures is generally low. Even in a dam failure situation, there is a low risk of downstream flooding and a low risk of downstream sedimentation issues. The primary issue that would result from failure for several of the dam structures is the loss recreational uses or the natural habitat (wetlands) formed by the dam structures.

Ongoing maintenance of these structures includes concrete repairs and parging, and vegetation management. Maintenance and vegetation management requires approximately 0.05 FTE per year.

Capital inputs into the structures vary widely depending on which structure. Erosion protection at Owen Sound Mill Dam is estimated at $200,000 to address overtopping during 100-year storm event. No substantive investments are expected at the other structures within the next 10-years.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

GSCA.DAM.001 - Berford Lake Dam Operational Manual 2023

GSCA.DAM.006 - Owen Sound Mill Dam Operations Manual 2021

GSCA.DAM.005 - Inglis Falls Dam Operational Manual 2021

GSCA.DAM.007 - Rankin Dam Operational Manual 2020

GSCA.DAM.006 - Dam Safety Study for Owen Sound Mill Dam 2008

GSCA.DAM.007 - Rankin Dam Safety Study 2007

Additional Costs to Address Issues/Risks at Non-Flood Related Dam Structures

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.05 FTE)	$3,000
Capital Investment (100-year overflow protection)	$20,000 ($200,000/10)
Total	**$23,000**

Drinking Water Source Protection

Under the Clean Water Act, 2006, the drinking water sources that must be assessed in a Source Protection Area are wells and surface water intakes that serve municipal drinking water systems for major residential developments. Vulnerable areas are delineated, and the degree of vulnerability is scored. For each vulnerable area, those activities and conditions that pose a significant risk to the drinking water are identified.

Drinking water sources can be impaired by the entry of contaminants. The areas where the potential for contamination is greatest require the highest level of protection. To focus the resources used for Drinking Water Source Protection to the greatest risks, the Clean Water Act, 2006, defines four types of vulnerable areas:

Highly vulnerable aquifers (HVAs) are groundwater aquifers that can easily be contaminated from land area above these aquifers.

Significant groundwater recharge areas (SGRAs) are areas that are particularly important for the replenishment of groundwater aquifers. Here, it is desirable to regulate or monitor drinking water threats that may affect the quantity of recharge entering an aquifer or its quality.

Intake protection zones (IPZs) are areas in the vicinity of surface water intakes. Intake protection zones are composed of an in-water (or offshore) component and an on-land (or onshore) component that drains into the offshore component.

Wellhead protection areas (WHPAs) are areas within aquifers that provide water to municipal drinking water wells. Within these areas it is desirable to regulate or monitor drinking water threats.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

The primary issues/risk that could limit the effectiveness of delivery of the source protection program would be on-going Provincial funding to ensure maintenance of the local Source Protection Committee and Source Protection Plan. Requirements under the Clean Water Act for maintenance of the program falls to Source Protection Authorities, however, without Provincial support, smaller municipalities would be challenged to fund the program in its current capacity. The province has a Transfer Payment Agreement with the lead Source Protection Authority (GSCA), whereby funding is provided for staffing and overall program support. Conservation authorities and municipalities need to maintain pressure on the provincial government to continue to fund this program at current levels.

If the provincial government ceased to fund this program, the cost to municipal partners would be approximately $230,000 annually.

Technical Studies:

SGSNBP SPR, 2015. Watershed Characterization Report. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Approved Assessment Report, 2015.

CRA, 2007. 2005-2006 Groundwater Technical Study, Saugeen Valley, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Conestoga-Rovers & Associates. Owen Sound, ON. November 2007.

Grey and Bruce Counties Groundwater Study (Waterloo Hydrogeologic, 2003)

Potential Costs to Address Risks/Issues for Drinking Water Source Protection*

Resource Needs	**Anticipated Annual Costs**
Program Operating Cost	$230,000
Total	**$230,000**

*This would only become a resource need if the Province of Ontario ceased to fund the program.

Environmental Planning

Natural Hazard Review

GSCA provides a specialized role within the land use planning process of Bruce County, Grey County and the eight lower tier municipalities within our watershed jurisdiction by providing natural hazard related expertise and input to decision makers under the Planning Act. This advice is also provided on a suite of other pieces of legislation, including the Aggregate Resources Act, the Drainage Act, the Environmental Assessment Act, and the Niagara Escarpment Planning and Development Act. The general objectives of this program are to prevent the loss of life, minimize property damage, social disruption, and direct development away from natural hazards.

Two main components of this program include plan input and application review. Plan input includes advising member municipalities and upper tier counties on Official Plans, Secondary Plans and Comprehensive Zoning By-law documents. Mapping of hazard areas is also provided to support hazard designations and hazard zone boundaries. Application review includes comments on plans of subdivisions, condominiums, severances, official plan and zoning by-law amendments, minor variances, and site plan control. These applications are largely privately driven. Comments are related to the natural hazard section of the Provincial Planning Statement and Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits.

Challenges facing this program include changes in provincial legislation, volumes of applications related to external market forces, availability of expert and knowledge resources, funding resources, and outdated guidelines and policies. Many of these challenges are driven by external factors. GSCA monitors trends to respond to changes in application volumes and changing provincial legislation and adjust program needs accordingly.

In 2023, GSCA added a Manager of Engineering Services position to bolster technical review capacity and improve service delivery. This was largely facilitated by a comprehensive review of program fees by an economic consultant and a shift towards cost recovery principles making the program more sustainable.

However, provincial fee freezes threaten program sustainability and overall ability for the program to manage application volumes efficiently due to challenges in maintaining cost recovery targets. It is important for the fee schedules to be reviewed and updated regularly to ensure departmental funding recovers the cost of reviews.

Risks within this department area are associated with sufficient program funding. There is a deficit in funding for staffing as well as for legal costs. GSCA is responsible for representing the Provincial Interest on matters relating to the review of natural hazards. One such responsibility is the requirement to initiate appeals to the Ontario Land Tribunal (OLT) on any decisions made under the Planning Act that are inconsistent with the natural hazard policies of the Provincial Planning Statement (PPS). To address this,

GSCA recommends establishing a legal reserve fund to cover the cost of OLT hearings. It is further recommended that $10,000 per year would be contributed to this fund.

Both the Natural Hazard Review and the Development Permit Review program areas need additional staffing. Anticipated staffing needs equate to 1.5 Full-Time Equivalents (FTE) fully within the department, plus a 0.5 FTE technical position. This could combine into two FTE positions at an anticipated annual cost of $170,000.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Development Permit Review

In addition to providing technical expertise to other agencies on natural hazard related issues, the GSCA is also the approval authority for applications submitted under Ontario Regulation 41/24: Prohibited Activities, Permits and Exemptions. Through this regulation created under the Conservation Authorities Act, GSCA is responsible for the review and issuing of permit applications for development activity occurring in areas that may be subject to flood, erosion, dynamic beaches or unstable soils or bedrock.

GSCA is responsible for compliance and enforcement related to unpermitted development activity that occurs within the regulated areas throughout the watershed. In rare cases, charges may be laid resulting in a provincial court process. Legal costs may be incurred for complicated or escalated issues. Cost recovery of the compliance program is challenging and typically runs

The permitting program faces the same challenges as the natural hazard review program and is largely influenced by external factors that drive permit application volumes. The general trend has been increasing permit applications since dating back to the previous regulation Ontario Regulation 151/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies Relied Upon

- Risk Assessment of Flood Hazards in the Georgian Bay Shoreline Areas of Grey County – Craigleith/Camperdown and Bothwell Creek, 2023
- Environmental Study Report - Kenny Drain and Tributary of Telfer Creek, 1993, 2014
- City of Owen Sound - East Side Master Servicing – Stormwater Management Study, 2007
- Beaver River Flood line Mapping Study (Heathcote & Kimberly), 1995

- Shoreline Management Plan, 1994
- Sauble River Flood line Mapping Update, December 1993
- Craigleith Camperdown Subwatershed Study, 1993
- Owen Sound Slope Stability – Part B – Gully Erosion 6th Ave. E and 2nd St. E., 1991
- Flood Damage Reduction Study of the Meaford Inner Harbour – Bighead River, 1985, Addendum - 1991
- Sauble River Flood line Mapping Study - Final Report, 1990
- Great Lakes System Flood Levels and Water Related Hazards, 1989
- Owen Sound Slope Study, 1988
- Geotechnical Investigation – Slope Instability 1378 8th Ave., 1985
- Clarksburg Flood Line Mapping, 1983
- Pottawatomi River Slope Stability Study, 1979

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (2 staff)	$170,000
Hazard Mapping Reserve	$100,000
Legal Reserve	$10,000
Total	**$280,000**

Flood and Erosion Control Infrastructure

Program Description

GSCA manages several flood and erosion control structures throughout the watershed with the goal of improving community safety. GSCA manages two flood control structures:

1. Clendenan Dam in the Town of the Blue Mountains serves to trap sheet ice to reduce the potential for flooding related to sheet ice in the Village of Clarksburg.
2. Taylor Street Detention Pond in the Town of South Bruce Peninsula attenuates the peak flow in the Taylor Street creek which flows through the residential areas in Wiarton and often flooded during spring freshet flows prior to construction of the pond.

GSCA manages 7 erosion control structures throughout the watershed at the following locations:

- Bighead River near Beautiful Joe Park in the Town of Meaford.
- Golf Course Creek at Highway 26 in the Town of Meaford.
- Indian Creek adjacent to the Indian Falls Conservation Area in the Township of Georgian Bluffs.
- Little Beaver Creek in the Town of Thornbury.
- Near the Sydenham River downslope from Parkview Estates in the City of Owen Sound.
- Sydenham River at 9th Street in the City of Owen Sound.
- Pottawatomi River near Alpha Street in the City of Owen Sound.

GSCA staff conduct annual inspections and maintenance of these structures to ensure that they continue to effectively serve their purpose in a functional way.

The primary risk associated with the flood and erosion control structures lies in the potential for failure. Failure of the flood control infrastructure could result in an increased risk of ice jamming and associated flooding in Clarksburg/Thornbury or flooding within Wiarton during a spring freshet.

Failure of the erosion control structures could result in failure of the slopes and/or banks that they serve to protect. GSCA staff regularly inspect these projects and note any issues. The rip-rap projects are currently all in good shape. However, the gabion basket projects are showing their age such as minor issues with baskets breaking.

Staff can address small repairs within the existing budget. Larger capital repairs will require municipal support and potentially Provincial funding support. All erosion control projects that qualify for the Provincial Water and Erosion Control Infrastructure (WECI) funding are special benefiting projects that will require the benefiting municipal partner to provide an equal share.

To ensure that municipalities are aware of potential future costs, annual inspection reports or notifications will be circulated to the relevant municipality to keep them informed of the state of the infrastructure. Municipal partners will be encouraged to build these potential costs into their asset management budgets so that timely repairs can be completed.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

GSCA.DAM.003 - Clendenan Dam Safety Study 2007

GSCA.DAM.003 - Clendenan Dam Operational Manual 2023

GSCA.DAM.010 - Taylor St - Stormwater Management Study 1983

GSCA.DAM.010 - Taylor St - Pipe Repair Options 2011

GSCA.EROS-001A - Bighead River Gabions - Bighead River Erosion Control in the Town of Meaford, 1979-81 (Areas A, B and C)

GSCA.EROS-001B - Bighead River Armour Stone - Bighead River Erosion Control in the Town of Meaford, 1979-81 (Areas D, E, F and G)

GSCA.EROS-002 – Golf Course Creek Gabions – Erosion Control in the Town of Meaford, Ainley and Assoc.

GSCA.EROS-003 – Indian Creek Balmy Beach Phase 1 (Area 5) – Engineer Design 1979

GSCA.EROS-003 – Indian Creek Balmy Beach Phase 2 (Area 6) – Engineer Design 1979

GSCA.EROS-003 – Indian Creek Balmy Beach Phase 3 (Area 1 & 2) – Engineer Design 1981

GSCA.EROS-004 – Little Beaver Creek Thornbury (Area D) - Little Beaver Flood and Erosion Report 1985

GSCA.EROS-005 – Sydenham River Parkview Estates – Slope Stability Study 1983

GSCA.EROS-006 - Pottawatomi River Slope Stabilization Engineer Design 1980

GSCA.EROS-007 – Sydenham River 9th Steet - Slope Stability and Erosion Study, Sydenham River Erosion Control Project, 1981 (study phase)

GSCA.EROS-007 – Sydenham River 9th Steet - Sydenham River Erosion Control Study, City of Owen Sound, 1981/82 (Engineering Design)

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0 staff)	$0
Dam Reserve	$0,000
Total	**$0,000**

Flood Forecasting and Warning

The GSCA maintains a flood forecasting and warning system for the eight member municipalities within our watershed jurisdiction. The purpose of the system is to minimize flood damage and loss of life by providing residents of flood prone areas with advanced warning of possible flood events. Through this program, GSCA works with local municipalities to develop flood contingency plans; monitor water levels, precipitation and snow water concentration; and to predict and communicate extreme water level changes. GSCA publicly shares watershed conditions on its website. All messaging released to the Municipalities and media outlets are posted on our website and shared through social media. GSCA also maintains an email list for those wishing to receive direct flood messaging.

The flood network relies heavily on computer resources to compile, store and visualize the data. The data transmission/collection relies on internet access, cellular coverage, and electrical power. The loss of any one of these resources severely reduces the information available to the GSCA team in the event of a flood scenario. Additionally, due to GSCA's small team size, the organization relies on a primary staff member to maintain the networks, interpret the data and provide flood forecasting in a timely manner. Steps are being taken to broaden this exposure within the organization.

The following would serve to address these issues:

- An on-site backup generator at the Administration Centre would be beneficial in the event of a power outage.
- The flood forecasting computers should ensure they are portable and can be quickly set up at other locations. This may also be needed if internet access is no longer available.
- Loss of cellular coverage may be isolated and does not directly impact the office equipment. However, it may prevent reporting of water level and rain gauge sensors. GSCA employs a variety of sensors and data transmission types. Although this adds to the complexity of the data collection, it aids in ensuring that the network is more resilient to localized outages.
- Additional staff resources and. To provide program support, an additional 0.5 FTE is required for a technician to learn and manage the field network.
- Equipment replacement funds are required to maintain the network in the long term.

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This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

GSCA Flood Contingency Plan – An Internal Municipal Document 2024 (updated annually)

GSCA Flood Operations Plan – An internal document for GSCA staff 2024 (updated annually)

Provincial Flood Forecasting and Warning Implementation Guidelines 2023

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.5 staff)	$42,500
Total	**$42,500**

Low Water Response

Program Description

Similarly to the flood forecasting programming that GSCA provides, GSCA also monitors watershed conditions throughout low water periods. GSCA continually monitors watershed conditions and collects rainfall and flow data. This rainfall data is summarized monthly and posted to the GSCA website. During times of low water, GSCA monitors the severity of the conditions, based on precipitation and stream flows, and coordinates a local Low Water Response Team (LWRT) when targeted thresholds are met. The LWRT reviews the criteria and make recommendations for temporary adaptation and mitigation of the effects of potential drought.

Extreme low water conditions do not occur very often. Staff resources beyond the watershed monitoring are only committed to the LWRT as the need arises. Staff time needs to be flexible so that programing priorities can be adjusted to accommodate the LWRT requirements.

Depending on the level of programming required for low water response, additional staff resources could create education products for "Water Conservation".

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

Ontario Low Water Response Guide 2010

Additional Costs to Address Risks/Issues

Resource Needs	Anticipated Annual Costs
Increased Staffing Need (0 staff)	$0
Materials	$0
Total	**$0**

PGMN

Since 2001, GSCA provides monitoring of a suite of groundwater wells as part of a partnership program with the Ministry of the Environment, Conservation and Parks (MECP). Through this program, GSCA conducts annual monitoring of groundwater levels and water quality at 10 well locations. The data collected through this program is used by the MECP to establish long-term baseline data record on groundwater quantity and quality in key aquifers across Ontario.

Currently, GSCA has limited staffing resources assigned to this program. Any request by MECP for additional sites or samples will require more staffing resources and may take away from other watershed monitoring efforts.

Increasing staff resources to the watershed monitoring program will improve the effectiveness of this program and reduce future risks that may result with program expansion.

Overall, the Watershed Monitoring program is understaffed and is only achieving the bare minimum tasks required for sampling. There is presently in-kind staffing/training support for this department from other staff, but this will not be sustainable as such in the future. Additional staff time is required for data management, data requests, reporting and training. An additional 0.1 FTE is required to sustain this program area and to provide some flexibility for any future pressures on this program.

Recent changes to the Conservation Authorities Act state that conservation authorities are required to cost share with the MECP on the costs of decommissioning an old well or installing a new well. GSCA does not currently have funding or reserves to cover this cost.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

Provincial Groundwater Monitoring Network Sampling Protocol – A Guide to the Collection and Submission of Groundwater Samples for Analysis 2009

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.1 staff)	$8,500
Contingency Reserve	$1,000
Total	**$9,500**

PWQMN

Since 1972, GSCA has partnered with the Ministry of the Environment, Conservation and Parks to monitor stream water quality at representative sites throughout GSCA's watershed jurisdiction. This early program was the precursor to the present-day Provincial Water Quality Monitoring Program (PWQMN) program that began in 1982. The program has changed over the years and the number of sites and parameters have changed based on Provincial funding. The Province has always provided lab support and GSCA has provided staff and vehicle resources to collect the samples. Presently, there are 10 sites sampled eight times annually throughout the ice-free season. GSCA continues to collect the samples and submit them to MECP for chemical analysis. Data is shared with GSCA and is used for our Watershed Report Cards.

Currently, GSCA has limited staffing resources assigned to this program. Any request by MECP for additional sites or sampling will require more staffing resources and may take away from other watershed monitoring efforts.

Increasing staff resources to the watershed monitoring program will improve the effectiveness of this program and reduce future risks that may result with program expansion.

Overall, the Watershed Monitoring program is understaffed and is only achieving the bare minimum tasks required for sampling. There is presently in-kind staffing/training support for this department from other staff, but this will not be sustainable as such in the future. Additional staff time is required for data management, data requests, reporting and training. An additional 0.1 FTE is required to sustain this program area and to provide some flexibility for any future pressures on this program.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.1 staff)	$8,500
Materials	$0
Total	**$8,500**

General Operating

Corporate Services

Corporate services provided at GSCA provides for the ongoing operation and management of the organization and include:

- Administration
- Financial Services
- Human Resources
- Governance
- Communications
- Asset Management and Fleet

These services, contained under the General Operating Expenses section of the Conservation Authorities Act, serve the broader needs of all programs and services within the organization.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Governance, Administration, Finance and Human Resources

Administration, finance and human resources portion of the organization provides leadership and ongoing management of daily finances and staffing resources central to the successful operation of the entire organization. This includes functions such as payroll, accounts payable/receivable, financial reporting, records management, strategic planning, staff support, governance and partnership building. This portion of the organization currently consist of four staff, including the Chief Administrative Officer, an Administrative Assistant, a Finance and Human Resources Manager, and a Finance Clerk. As the organization grows and administration becomes more complex, the need for a dedicated human resources professional would be an asset to the organization. This in-house expertise would serve to free up time of the rest of the administration team while also ensuring that staff are receiving the best support practical. From a cost perspective, there is the potential to grow internally in this regard and backfill any gaps that arise from this change.

Communications

GSCA's internal communications team guides the effective external communications of the organization and provide services and materials designed to increase awareness and support for the vital work of GSCA, including media relations, advertising, content creation, social media content, and website management. The ability to tell GSCA's

story effectively and build understanding, engagement and support from partners and the public can be a difficult task given the complexity of the mandate of conservation authorities. The risk associated with a of lack understanding can translate into a lack of public and partner support, potentially leading to a lack of funding and negative public image.

Through the creation of communications plans, that include marketing and engagement, to enhance understanding of the programs and services offered by GSCA, the importance of these services to our communities can be expressed. GSCA's provision and participation in community events also provides an opportunity for the public to support the important work that GSCA undertakes.

To effectively address all communications needs for the organization, staffing resources, or funding for contracted projects, are needed to create and implement effective communications plans in combination with all communication materials including signage, brochures, website updates and major overhauls, social media as well as participating in events.

Asset Management and Fleet

GSCA's asset management and fleet programming tracks the capital assets within the organization's ownership, plots the projected lifespan of each asset, and determines the future needs for maintenance and replacement costs. The biggest issue facing the GSCA at this point is that asset needs are outpacing asset replacement resources. In some instances, this can be addressed by eliminating certain assets at end of life. However, some assets, such as the fleet, the Administration Centre, and other key infrastructure, are required for the ongoing operation of the organization.

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.8 Admin staff)	$55,000
Increased Staffing Need (0.5 comms staff)	$38,000
Fleet Reserve Increase	$20,000
Admin Reserve Increase	$10,000
Total	**$123,000**

Information Management and Technology

This service area oversees the management, delivery, training and direction of diverse types of internal and external information produced and stored by GSCA. Information management and technology supports all departments within the organization and other associated individuals and groups that use GSCA's computer technology resources and assets. A combination of staff, hardware, software and data all serve to ensure a fully integrated, secure network and the provision of required applications to meet the technology needs of all staff and users in the organization. Through these programs, we streamline work, application procedures and data flow across all departments for maximum efficiency within the organization.

The geographic information systems (GIS) side of this program area undertakes the creation, acquisition, storage, analysis and display of spatial data and other associated information. Much of this information is made available to the public and partners.

Ongoing, increasing threats to computer systems through malware, ransomware, spam and phishing attempts. Attackers are becoming increasingly sophisticated in attempts to infiltrate networks. Associated risks include liability associated with data breaches, data loss, full systems loss, staff time.

Increasing speed at which technology changes is a constant issue. Trying to keep up with hardware and software changes and needs is a difficult task with limited resources.

GSCA has acquired significant IT assets, which require significant planning and budgeting to anticipate renewal before risks associated with hardware and data loss become too high.

Ongoing system updates to all operating systems, software and hardware help to ensure that the most current safeguards in place. Monitoring and analysis of all internal and external network traffic and appropriate end-user training for spam, phishing and malware attack prevention also assist in mitigating risks. Finally, GSCA ensures that ransomware insurance protection is maintained annually.

Addressing these risks takes significant staff time both from the Information Services staff and the end users who need to be trained appropriately. It also includes costs associated with hardware and software used to mitigate risks such as physical and software firewalls, and cloud services that safeguard against threats. A lot of time and funds go into ensuring appropriate ongoing staff training and renewal of IT assets

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

- Data Capture Specifications for Hydrographic Features
- Federal airborne LiDAR data acquisition guideline

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0 staff)	$0
Increased Cyber Security Implementation	$4000
Total	**$4,000**

Category 2 Programs and Services

Drinking Water Source Protection Risk Management Official Services

The Clean Water Act, 2006 stipulates that a municipality is responsible for Part IV Enforcement of Source Protection Plans, which includes implementation of Risk Management Plans for properties within vulnerable source protection area, conduct inspections, and issue screening notices for restricted land-use activities to ensure compliance with the Act. All municipalities within the boundaries of the Grey Sauble Source Protection Authority have elected to delegate responsibilities to staff within Grey Sauble Conservation Authority as agent of the Municipality to carry out enforcement under Part IV of the Act.

This program relies on the same technical studies used in the creation of the vulnerable source protection areas noted within the Source Protection Program, including:

The primary issues/risk that could limit the effectiveness of delivery of the source protection risk management official services is the renewal of 5-year service level agreements with participating municipalities. If a significant number of municipalities in the Region decide not to renew these agreements, then program costs would need to be increased for remaining partners. Overall program costs have been minimised by working through GSCA as the designated service delivery agent, as opposed to municipalities carrying out these duties individually.

Annual program costs for delivery of risk management services have been maintained at around $65,000 per year, which covers Risk Management Official and Inspector responsibilities across 14 participating municipalities.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

SGSNBP SPR, 2015. Watershed Characterization Report. Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Approved Assessment Report, 2015.

CRA, 2007. 2005-2006 Groundwater Technical Study, Saugeen Valley, Grey Sauble, Northern Bruce Peninsula Source Protection Region. Conestoga-Rovers & Associates. Owen Sound, ON. November 2007.

Grey and Bruce Counties Groundwater Study (Waterloo Hydrogeologic, 2003)

Potential Costs to Address Risks/Issues for Risk Management Official Services*

Resource Needs	Anticipated Annual Costs
Program Operating Cost	$65,000
Total	**$65,000**

*This would only become a resource need if current municipal partners stopped participating in the program.

Category 3 Programs and Services

Environmental Education

The environmental education program strives to deliver meaningful environmental education programs that help participants connect with the natural environment and embed conservation into their lives. It operates under three pillars: Experiential, Curriculum-Linked and Community Education & Activation.

Experiential Education delivers signature programming to children primarily through the Grey Sauble Day Camp. Expanding experiential programming for children across the watershed will involve acquiring additional staff resources, exploring partnerships, and developing programming to be delivered to external organizations and groups.

Curriculum-linked Education involves working with teachers and parents to deliver curriculum-linked environmental education programming that expands participant's knowledge about the environment and education.

The Community Education and Activation pillar provides opportunities for people throughout the GSCA watershed to access environmental education programming and resources and engage with the vital work that GSCA does. It leverages our unique assets, both in our staff expertise and the beautiful properties that GSCA owns and manages. Examples of this programming are guided hikes and bioblitzes.

The primary risk is limited resources to provide programming and lack of inside space, specifically related to inclement weather. Although user fees have been set to offer some programming, the development of programming, reference material and purchase of materials and supplies can take staffing resources beyond what the market can support.

Category 3 agreements with municipal partners to utilize levy to offset some of the costs of this program would provide more stable base funding. The creation of funding partnerships and acquisition of grants and sponsorships through local organizations who want to give back to the community would also help to address these risks. Work with school boards to channel funding for curriculum-linked education towards GSCA to offer Environmental Education to all potential schools.

The cost of addressing the issues will be related to levy funding from municipalities. The other cost is staff time to seek out partnerships, sponsor and grant funders.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

Environmental Education Framework

Additional Costs to Address Risks/Issues*

Resource Needs	Anticipated Annual Costs
Increased Staffing Need (1 FTE)	$58,000
Materials	$0
Total	**$58,000**

*Any levy funding would be contingent upon municipal support and category 3 agreements.

Forestry Services

Under this program area, GSCA provides ethical, affordable, and sustainable forestry-related services to private landowners, enables good forest management practices, and increases forest cover throughout the GSCA watershed. These services include planting trees, forest management plans, and the sale of affordable native trees and shrubs.

Trees provide numerous benefits to landowners and the entire community, such as improved air and water quality, increased resilience to the impacts of flooding, and reduced household energy bills. Through this program, GSCA offers landowners reduced pricing on trees through bulk purchasing, and offers tree planting services, with grants to help offset the cost of these services. Additionally, GSCA can prepare Managed Forest Plans for landowners which allows them to participate in the Managed Forest Tax Incentive Program.

GSCA has limited staff to be able to provide these services throughout its watershed. GSCA staff need to evaluate projects on several factors including their chance of success, financial viability, and its impact on the surrounding landscape. Staff are not able to take on all desired projects because of these factors. Most tree planting projects receive funding that partially offsets the landowners' costs. Funding is reliant on meeting certain specifications as described by the funders. For staff to take on poorer quality projects, applicable fees would need to be increased to ensure the program is financially stable. Additional funds would allow for smaller and/or more specialized projects are able to be completed.

For Managed Forest Plans, staff must also ensure interested landowners meet the requirements of this program and do not conduct inappropriate activities that are not allowed by this program. This program is administered by the Ontario government and the program does not allow for variations from their guidelines.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

Conservation Land Tax Incentive Program policy, 2018

Ontario Managed Forest Tax Incentive guide, 2012

Additional Costs to Address Risks/Issues*

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.5 Forestry Tech)	$37,500
Materials	$0
Total	**$37,500**

*Any levy funding would be contingent upon municipal support and category 3 agreements.

GSCA Watershed Monitoring Network

In addition to the Provincial Water Quality Monitoring Network (PWQMN), GSCA has established a broader monitoring program to better capture and cover the 3200 square kilometer area of the GSCA watershed. This Category 3 monitoring program includes an additional 25 water chemistry sites which are sampled eight times annually throughout the ice-free season for E.coli, suspended solids, and general nutrients. This sampling program provides a series of point-in-time data sets that can be compared over several years to determine general trends in watershed health. This data is publicly available on the GSCA website.

GSCA also undertakes a benthic macroinvertebrate sampling program at 33 sites throughout the watershed. The samples are collected and analyzed in-house by GSCA staff. The information provided by the benthic communities within each sample provide a better understanding of the overall health of a stream and different benthic species has a different tolerance to pollutants or poorer overall water quality.

The information collected through these sampling programs, in conjunction with forest and wetland cover mapping, is used to prepare Watershed Report Cards and Watershed Health Checks that are reported back to the public and our partners.

Information or data management is also a key component to this program. GSCA maintains watershed monitoring data in a comprehensive database. Data is pulled from this database to support data requests and complete watershed-based summaries and reports.

Currently, GSCA has limited staffing resources assigned to this program. Any request from partners for additional sites or samples will require more staffing resources and may take away from other watershed monitoring efforts.

Increasing staff resources to the watershed monitoring program will improve the effectiveness of this program and reduce future risks that may result with program expansion.

Overall, the Watershed Monitoring program is understaffed and is only achieving the bare minimum tasks required for sampling. There is presently in-kind staffing/training support for this department from other staff, but this will not be sustainable as such in the future. Additional staff time is required for data management, data requests, reporting and training. An additional 0.1 FTE is required to sustain this program area and to provide some flexibility for any future pressures on this program.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Technical Studies:

BioMAP: concepts, protocols and sampling procedures for the southwestern region of Ontario, Griffiths, Ronald W.

CO Watershed Report Card Guide

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.1 staff)	$8,500
Materials	$0
Total	**$8,500**

Other Conservation Lands Management Programs

In addition to the mandatory programming that GSCA offers on and related to conservation lands management, GSCA also provides several services related to conservation lands that are considered Category 3 program areas. These Category 3 programs and services typically generate revenue for the GSCA and offset the levy costs associated with the mandatory Category 1 programs and services. These program areas are Category 3:

- Land acquisition and disposition.
- Partnership building and support.
- Land lease and agreement management.
- Paid parking management.

Land Acquisition and Disposition

As per Section 21(1)(c) of the Conservation Authorities Act, GSCA has the power to acquire by purchase, lease or otherwise any land that it may require, and, subject to subsection (2), to sell, lease or otherwise dispose of land so acquired. GSCA has been acquiring land since 1958 and currently owns 11,756 hectares (29,049 acres).

Land acquisition means to obtain from a willing landowner, interest in land title for conservation purposes and includes such acquisition as land bequest, land trading, donation, and fee simple purchase.

This process for acquisition or disposition is guided by the criteria laid out in GSCA's Land Acquisition and Disposition Policy (2006).

Partnership Building and Support

Partners form a vital part of the success of GSCA. Due to the limited resources available, GSCA depends on successful partnerships to accomplish its goals and serve our watershed communities. Although partnership building is vital to all aspects of GSCA's work, investment by community partners in GSCA lands is particularly important. The amazing work associated with these partnerships can be seen on GSCA lands through work from partner and volunteer groups such as the Friends of Hibou, the Grey Sauble Conservation Foundation, and the Inglis Falls Arboretum Alliance. Beyond this, numerous community groups and partner agencies assist on an ongoing basis to make GSCA lands the amazing spaces that they are.

Land Lease and Agreement Management

GSCA uses land leases and agreements to manage the formal use of GSCA lands by organizations or individuals other than GSCA. This includes short term uses such as pavilion rentals or events, medium term uses such as the farming of agricultural fields or ski club trails, or even long-term uses such as the placement of office and recreation buildings. GSCA estimates that it costs the Authority approximately $10,000 per year to manage these leases and agreements. In 2025, the combined benefit of these leases and agreements is expected to generate almost $94,000. This revenue serves to offset levy for the management of conservation lands.

Paid Parking Management

In addition to the land leases and agreements that GSCA uses for managing some conservation lands, paid parking areas have been established at several of the more popular conservation areas. Currently ten GSCA properties have parking areas where payment is required to park. This parking management program has been very successful over the last several years and has provided much needed revenues to invest in the management of GSCA's properties. GSCA estimates that is costs the Authority approximately $86,000 per year to manage this program. In 2025, parking revenues are expected to net over $280,000.

It should be noted that the following steps have been taken to keep access to conservation lands affordable:

- Only ten of over 80 property groupings have paid parking areas.
- Of these ten, approximately half of these properties also have non-paid parking areas.
- There is no cost to enter the properties, only for parking.
- Membership passes are available for those that plan to visit often.
- Membership passes are provided to local libraries for loan, similar to books.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0 staff)	$0
Materials	$0
Total	**$0**

Watershed Stewardship and Restoration

The focus of GSCA's stewardship programming is to inspire and enable others to become stewards of their land by making environmentally conscious decisions and implementing projects that will provide positive environmental benefits.

Through this program area, GSCA secures external grant dollars to support landowners with projects that improve water quality, promote soil health, and restore wildlife habitat. Some of the projects that GSCA has undertaken to date include livestock exclusion fencing, wetland creation, and winter cover crops for agricultural land. GSCA works in partnership with community partners such as ALUS Grey Bruce, Stewardship Grey Bruce, and the Bruce Peninsula Biosphere Association to bring this project to fruition.

Another important aspect of this program area is invasive species monitoring and management on GSCA properties, as well as supporting community groups with their invasive species management projects.

A lack of consistent annual funding jeopardizes the long-term viability of program. This includes funding for staff time as well as for on-the-ground projects.

Provision of base funding for one full time position through levy would provide the annual support necessary to sustain this program.

To ensure long-term viability of the program sustainable funding must be in place for effective delivery. As this is a Category 3 program, it is only eligible for municipal levy funding through an agreement with each participating municipality. To date. grants have been available to offset this cost. However, this is inconsistent and cannot be relied upon on a long-term basis.

To address these issues, having established base funding to ensure the position is fully funded through municipal levy would allow staff to focus on securing grants for projects instead of salary.

This program area complies with the regulations referred to in Section 40(1)(b) of the Conservation Authorities Act.

Additional Costs to Address Risks/Issues

Resource Needs	**Anticipated Annual Costs**
Increased Staffing Need (0.5 staff)	$37,500
Project Funding	$0*
Total	**$37,500**

*A dollar amount is not assigned to project funding. The more funding that is available, the more projects that can be completed throughout the watershed.

Review and Consultation Process

The Watershed Resource Management Strategy (Watershed Strategy") for Grey Sauble Conservation Authority (GSCA) was developed following the Conservation Authorities Act and its regulations with consideration of Conservation Ontario's Guidance draft content from other conservation authorities.

A Draft of the Watershed Strategy was provided to the Board of Directors prior to being made available for broader consultation to provide an overview of the regulatory requirements and how they are proposed to be addressed by the Draft following which the document will benefit from consultation with stakeholders and the public which will include (at minimum):

- Provide all members municipalities, SON Environment Office, and Metis Nation of Ontario with a draft of the Watershed Strategy.
- Upload the draft to the GSCA website with an online form for feedback.
- Compile comments and feedback received, incorporating change to the Draft Watershed Strategy where appropriate.
- Ensure that the final Watershed Strategy is made available on the GSCA website for future consideration.

This Watershed Strategy document shall be monitored from time to time to evaluate its ongoing relevance. The Watershed Strategy and programs within will be subject to an in-depth review at least every five years.

Comprehensive review will include a wholistic consideration of the programs within the document considering current GSCA programming and the ongoing effectiveness of such programming. Any changes to the document will be made available for comment by municipal partners, will be available on GSCA's public facing website, and will be brought forward to the GSCA Board of Directors for review and endorsed by resolution.

comments received through consultation to be considered for final version

Please provide your comments online at:

link to be included in consultation version