

The Grand River A Canadian Heritage River

Canadian Heritage River Systems
Ten Year Monitoring Report
2014-2024

May 2025

Prepared for the Canadian Heritage Rivers
Board by the Grand River Conservation
Authority



**Canadian
Heritage Rivers
System**

**Réseau des
rivières du patrimoine
canadien**

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Introduction

The Grand River flows from Dundalk through rural and urban landscapes to Port Maitland on Lake Erie. The river is known by many names, including Ó:se Kaniataratátie', a Mohawk name meaning "Willow River", and Pesshinneguning, an Anishinaabemowin (Ojibwe) name meaning "the one that washes the timber down and drives away the grassweeds". These names reflect the traditional connections between the river and the land, and the people who call the watershed home.

The Grand River watershed is within the traditional territories of the Six Nations of the Grand River and the Mississaugas of the Credit First Nation. The watershed includes lands within the Haldimand Proclamation (1784) and parts of the Between the Lakes Treaty (1792) and the Ajetance Treaty (1818).

The Grand River and its tributaries – the Conestogo, Eramosa, Nith, and Speed rivers – were named Canadian Heritage Rivers in 1994. The designation reflected the outstanding cultural and recreational values of the Grand River. This ten-year monitoring report documents how our collective understanding, interpretation, communication, and celebration of the river's natural, cultural, and recreational heritage has evolved over the past decade.

The Grand River Conservation Authority (GRCA) serves as a River Steward, the lead organization that undertakes reporting to maintain the Canadian Heritage River designation on behalf of the individuals, communities, and organizations that nominated the Grand River and continue to care for and steward the river.

Our watershed

The Grand River watershed is the largest in southern Ontario. It's about the size of Prince Edward Island – 6,800 square kilometres – but with more than 5 times the population. The Grand River begins as a small stream in the Dufferin Highlands and travels about 300 kilometres before emptying into Lake Erie at Port Maitland. Along the way, it picks up its major tributaries, the Conestogo, Nith, Speed, and Eramosa rivers, and Whiteman's and Fairchild creeks.

First Nations have been deeply connected to the land and water in the Grand River watershed since time immemorial. The watershed and river were sources of water, transportation, and habitat for the terrestrial and aquatic plants and animals First Nations relied on.

Roughly three centuries ago European settlement began, and communities grew along the river as it provided a source of water and power for mills. This led to the development of local industries and economic prosperity. Agricultural intensification, population growth, and industrial expansion altered the landscape and resulted in deforestation, draining of wetlands, water pollution, and habitat loss and fragmentation.

Today, the watershed spans parts of 38 municipalities and the reserves of Six Nations of the Grand River and the Mississaugas of the Credit First Nation. About 80% of the watershed's one million residents live in the cities of Kitchener, Waterloo, Cambridge, Guelph, and Brantford.

The watershed is a highly diverse and interconnected system and continues to be heavily influenced by intensive agricultural practices, population growth, changes to land cover and resource use, and climate change. Many individuals and organizations are working together to improve the health of the Grand River, by reducing sources of pollution, restoring terrestrial and aquatic habitats, conserving land and water resources, and fostering sustainable use and enjoyment of the river.

How the report was developed

This report was developed by the Grand River Conservation Authority with input from some of the individuals, municipalities, First Nations, and nongovernmental organizations that work to steward the Grand River. The report was shaped and informed by:

- The Canadian Heritage Rivers System *Principles, Procedures and Operational Guidelines* (2024), a key reference for heritage rivers that lays out the program principles, governance, nomination process, and reporting requirements (including guidance for ten-year monitoring reports),
- Annual monitoring reports (2015-2024) for the Grand River documenting significant events, actions, research, and/or studies that occurred over the last decade in relation to the heritage river, prepared by the GRCA,
- Information from many relevant public and private groups from websites, reports, information sessions, meetings, and a survey, and
- A partnership with the University of Waterloo's Collaborative Water Program.

A Heritage River Information Session was held in Cambridge on March 6, 2024. About 40 participants represented a mix of municipal, provincial, federal, private sector, and community organization interests. The objectives of the session were:

- To share information about the Grand River as a Canadian Heritage River,
- To prepare to collect information for the ten-year monitoring report, and
- To provide an opportunity for participants to connect and collaborate to celebrate the Grand River and the 30th anniversary of the designation.

An online survey (Appendix A) was circulated to relevant groups and individuals to gather information on heritage river-related events, actions, studies, and changes and trends in heritage values over the last decade. Thirty responses were received, representing perspectives from the headwaters to the lower river. About half of the participants focused their responses on river-based recreation, while the other half responded to questions about human heritage or natural heritage. The survey informed the chronology of activities and discussion of heritage values presented below and in Appendix B.

The Collaborative Water Program (CWP) is an interdisciplinary graduate program serving all six faculties at the University of Waterloo. The program equips the next generation of water leaders in systems thinking and practical skills to understand and respond to complex water challenges. The GRCA partnered with the CWP to help identify changes, trends, and threats to the heritage values of the Grand River. Nineteen graduate students from engineering to economics programs synthesized information from peer-reviewed literature and publicly available datasets, consulting reports and other grey literature, and expert guidance, to comment on a subset of the heritage values. The students were joined in a world café style forum on October 30, 2024, by more than twenty experts from conservation authorities, academia, regional tourism organizations, trails organizations, cultural groups, and First Nations communities (the list of participants is included as Appendix C). Briefing notes prepared by the students informed the discussion of heritage values presented below and in Appendix D.

Chronology of significant events, actions, research, and/or studies

As the largest watershed in Southern Ontario, spanning parts of 38 municipalities and two First Nations, there are countless actions taken by individuals and organizations each year that

contribute to understanding, interpreting, celebrating, and conserving the heritage of the Grand River and its tributaries. As such, any accounting of the activities will be incomplete. Appendix B lists some of the activities that have occurred over the past decade. What follows in this section is a summary of substantive new directions or milestones over the past 10 years.

First Nations cultural awareness and reconciliation

A global and local conversation about Indigenous history, rights, treaties, truth and reconciliation is underway and is influencing how we understand the heritage of the Grand River and the history of the First Nations who lived here long before European settlement.

The United Nations Declaration on the Rights of Indigenous Peoples (2007) was endorsed by the Government of Canada in 2016. The declaration states 46 articles or rights that constitute the minimum standards for the survival, dignity, and well-being of Indigenous peoples. The articles are relevant to the Canadian Heritage River designation, speaking to the right of Indigenous peoples to maintain, control, protect and develop their cultural heritage and traditional knowledge. The First Nations in the Grand River watershed have unique ways of knowing and stewarding the Grand River that have existed since time immemorial.

The Truth and Reconciliation Commission of Canada: Calls to Action (2015) documents the truth of survivors of residential schools and issues 94 calls to action to address the legacy of residential schools and to advance reconciliation. The Grand River watershed is home to the former Mohawk Institute Indian Residential School which operated from 1885 to 1970. Six Nations of the Grand River now operates the Woodland Cultural Center from the building and offers virtual tours to share the history of the residential school and the experiences of survivors.

The heritage of the Grand River is inherently tied to the history, knowledge, values and traditions of the First Nations that continue to call the watershed home. Many events and activities are helping to foster greater awareness and appreciation for Indigenous ways of knowing and stewarding the river, including:

- Two Row on the Grand¹, held annually since 2016, is a 10-day canoe trip on the Grand River where Indigenous and Non-Indigenous participants build mutual respect and understanding of values and culture through the shared experience. The canoe trip is a physical embodiment of the Two Row Wampum, the original peace treaty between Indigenous and settler communities. An article published in the Canadian Journal of Native Education in 2019 illustrated the experiences of an Indigenous participant and a non-Indigenous participant in the event².
- First Nations-led Water Walks³ have become annual events in the watershed. Inspired by Anishnaabe Elder Josephine-Baa Mandamin, people from all nations join in a week-long ceremonial walk honoring the Nibi (water) from the river's mouth to the headwaters.
- Ohneganos Ohnegahdę:gyo⁴ is an Indigenous water research program led by McMaster University's Dr. Dawn Martin Hill. This interdisciplinary team of academics, local experts and project partners is creating new ways to integrate Indigenous Knowledge and Western Science. Among other initiatives, Ohneganos and its partners held a Traditional Ecological Knowledge Summit on March 6, 2024, at Six Nations of the

¹ [Two Row On The Grand | Annual Canoe Paddle on the Grand River](#)

² Freeman, B. and T. Van Katwyk. 2019. Testing the Waters: Engaging the Tekeni Teyoharke Kahswenhtake/Two Row Wampum into a Research Paradigm. *Canadian Journal of Native Education* 41 (1): 146-167. ([link](#))

³ [All Nations Grand River Water Walk](#)

⁴ [Ohneganos](#)

Grand River. Through digital oral storytelling, a youth-led video podcast, and other projects, the group is helping to share Traditional Ecological Knowledge.

In 2021 a new Strategic Plan was released by the Canadian Heritage Rivers Board for 2020-2030. The strategy acknowledged that the program has not adequately included or considered Indigenous perspectives, and it identified advancing reconciliation on Canadian Heritage Rivers as a strategic priority. Participants in the Collaborative Water Program heritage river workshop agreed, noting opportunities to incorporate more Indigenous perspectives.

Connecting with the Grand River

The Grand River forms the backbone of a growing network of trails and water routes enjoyed by hikers, cyclists, and paddlers. Much work has been done by recreational interest groups, Regional Tourism Organizations (RTOs), and others, to improve recreational infrastructure and user experiences. Art and cultural experiences are helping to connect people with the Grand River and its history. Some key initiatives are noted below while other examples are included in Appendix B.

- Grand River Access Point Improvement Project: RTOs working with the GRCA, municipalities, and many other partners are assessing river usage and awareness and improving river access points. The project began with development of an Access Point Standards Manual and Signage and Style Guide. The new standards were piloted at Wilson's Flats in the Township of Centre Wellington and projects followed at Idlewood Creek in the City of Kitchener, West Montrose in the Township of Woolwich, the Cambridge to Paris Rail Trailhead in the City of Cambridge, and Otterbein Road in the City of Kitchener. Improvements have included parking, washrooms, canoe racks, picnic tables and benches, information kiosks and maps, garbage bins, and improved signage (e.g., river mile markers).
- Opportunities to paddle the Grand River are expanding. Six Nations Tourism offers guided tours that share information about First Nations beliefs, centred on the Haudenosaunee Thanksgiving Address. Grand River Rafting developed a new paddling route for the lower Grand River from York to Cayuga, named Steamboat Alley in recognition of the historical development of locks and canals for steamship passage by the Grand River Navigation Company. Grand River Experiences developed a Nith River guided canoe trip.
- Grand River Histories Project⁵, lead by RTO #4, recognizes that telling the story of the Grand River is as important for fostering connection with the river as creating recreational infrastructure. Storytellers, artists, and creatives came together to share experiences, resulting in the creation of a program to fund experience development. Funding supported Tom Ostapchuk's short film *The Grand: From source to mouth*⁶, documenting his self supported source to mouth kayak trip down the Grand River. The film was an official selection for the Paddling Film Festival World Tour, the Waterwalker Film Festival, and the Forest City Film Festival.
- The Grand River Community Play Project: *The Voice of the River*⁵, led by playwright Peter Smith, held interactive performances throughout the watershed, serving as "prologues" for a planned event running the length of the river in 2025. Held in partnership with RTO #4 and members of Six Nations of the Grand River, the project

⁵ [The Grand River Community Play Project Case Study, Prologue #1](#), Chiefswood, November 2022

⁶ [The Grand - Source to mouth](#)

uses performance and storytelling to reconnect people with the river and a sense of place.

Recognizing milestones

The year 2024 marks the 30th anniversary of the naming of the Grand River and its tributaries as Canadian Heritage Rivers. This milestone has been acknowledged by many groups in many ways, including:

- *Currents of Change: Inspiring Action along the Grand River*, a new exhibit that opened at the Regional Municipality of Waterloo's McDougall Cottage Historic Site in June 2024. Through a blend of history, ecology, and Indigenous and settler narratives, this captivating exhibit examines the profound and dynamic connection between the Grand River, the City of Cambridge's heritage, and our collective future. The exhibit was accompanied by the *Grand Inspirations Art Contest* that invited artists of all media to submit a work that expresses their unique connection to the Grand River. Forty-one entries were received, and winning entries were selected by public voting and displayed as part of the Currents of Change exhibit.
- River Heritage Festival: This festival held on September 22, 2024, at the GRCA's Brant Conservation Area celebrated the river with exhibits from 17 parties, including the Conservation Authority, local municipalities, First Nations, and non-governmental arts, recreation, environmental, and cultural organizations. A couple of hundred people participated and there were opportunities to bike, hike, and paddle on the river.
- Many other public and private sector events acknowledged the 30th anniversary and included celebration of the River's heritage, including the interactive Voice of the River: The Grand River Community Play Project at the annual Hillside Festival on the Speed River at Guelph Lake Conservation Area, the Bikes and Blues Festival held by Water Cycles in Elora, special promotions by outfitter Grand River Rafting Company, and a River Talks lecture series held by Grand River Dinner Cruises and Six Nations Tourism.

Appendix B includes more events and activities held in 2024 to recognize the 30th anniversary of the Grand River's naming as a Canadian Heritage River.

In addition to marking the 30th anniversary of the designation, 2024 marked the 50th anniversary of the Great Flood of 1974 that inundated communities along the Grand River, including Kitchener (Bridgeport), Cambridge (Galt) and Brantford, causing millions of dollars in damages. This year was also the 70th anniversary of Hurricane Hazel, a historic storm that significantly impacted Southern Ontario and fundamentally reshaped the approach to flood protection and management. These milestones in how river communities have been impacted and adapted to fluctuating water levels were recognized locally:

- Cambridge's Gaslight District includes the River Lines art installation. Floor sensors and musical sounds encourage participants to connect with each other in honor of the way communities worked together to respond to the Great Flood.
- The Cambridge Fire Hall Museum & Education Centre and its partners created The Great Flood of '74 - Cambridge's Watershed Moment. The event engaged over 1,000 participants in exhibits, walking tours, local businesses, presentations, videos, and interviews. The community will continue to benefit from the events as pictures, scrap books, oral histories and other materials are collected and donated to local archives for posterity.
- The Cambridge Public Library created a display on Hurricane Hazel, including photos, newspaper articles and technical information.

Changes and threats to natural, cultural and recreational values

The following sections highlight some of ways the natural, cultural and recreational values of the Grand River have been observed to be changing over the last decade. More detailed information is presented in Appendix D, according to the framework established by the Canadian Heritage Rivers System Principles, Procedures and Operational Guidelines (2024).

Natural heritage values

The Grand River was not designated a Canadian Heritage River based on its natural heritage values. However, in keeping with the Canadian Heritage Rivers System Principles, Procedures and Operational Guidelines (2024), natural heritage values are included in annual and ten-year reports. Despite not being designated for natural heritage, the river and its watershed contain an abundance of aquatic and terrestrial ecosystems that support a variety of flora and fauna of national significance.

The watershed's natural heritage is described in more detail in a variety of places, including but not limited to:

- Watershed-scale reports, including a series of eleven Natural Heritage Characterization Reports⁷ produced by the GRCA between 2017-2022, a State of Water Resources report (2020), the Grand River Water Management Plan (2014), the Grand River Watershed Fisheries Management Plan (1998), and the Grand River Watershed Forest Plan (2004).
- Municipal natural heritage system reports and mapping, as well as studies to guide urban area expansions, such as those completed over the last decade for Blair Creek, Freeport Creek, Randall and Breslau Drains, and the tributaries of south Guelph and north Brantford.
- Collaborations with First Nations, including a Six Nations-led survey of fish consumption and an Ohneganos-affiliated survey of fish and macroinvertebrate communities in McKenzie Creek, a tributary of the southern Grand River, both completed in 2024.

The natural heritage values of the Grand River were fundamentally impacted by European settlement of the watershed about three centuries ago. A recent Watershed Report Card was prepared by the GRCA to benchmark watershed conditions. The report card noted that forest cover is generally low, especially in urban areas and productive farmlands. Forest cover ranges from 26% of the land area in the McKenzie Creek basin, to 11% of the land area in the Conestogo River basin. Overall, wetlands cover about 10% of the watershed. The Upper Grand River, Speed River, and Whiteman's Creek basins had the greatest extents of wetland cover, while the Conestogo River and lower Grand River basins had the lowest extents.

Municipalities, non-governmental organizations, the GRCA and other agencies continue to work together to improve aquatic and terrestrial ecosystems in the Grand River watershed. Notable initiatives over the past decade include:

- The City of Kitchener established a Habitat Banking Arrangement with the Department of Fisheries and Oceans to track additions and losses of stream habitat resulting from infrastructure projects. The City has rehabilitated or naturalized about 4.3 km of creeks over the past decade. Projects included removing concrete-lined channels, widening and naturalizing watercourses, and improving aquatic habitat. These projects produce a range of benefits from healthier ecosystems to more climate resilient urban communities.

⁷ [Natural Heritage Systems | Grand River Conservation Authority](#)

- The City of Waterloo has completed an average of 1 creek rehabilitation/restoration project every year over the past decade. These projects have included bank stabilization measures, reconfiguration where required, restoration and rehabilitation of corridor features such as wildlife sanctuary, wetland protection and public active transportation routes. The City continues to prioritize creek work through its environmental studies and updates to the Stormwater Management Master Plan.
- Ducks Unlimited Canada has a long history of restoring and conserving wetlands within the Grand River watershed, with most of these projects being delivered through DUC's small wetland restoration and large wetland rebuild programs in partnership with private landowners. Since 2014 DUC has restored a total 710 acres of wetland habitat, through 115 individual projects. In addition, DUC has secured 1910 acres of existing uplands and 960 acres of existing wetlands through the use of private conservation agreements to ensure that these crucial habitats remain on the landscape.
- The Mill Creek Stewardship Rangers Program rehabilitated > 1 km of Mill Creek and removed beaver dams to improve fish passage (Cambridge).
- Since 2014 the GRCA has facilitated planting of 983,000 trees on private land. These tree planting projects include retirement of 560 ha of marginal agricultural lands, establishment of 188 km of windbreaks and 72 km of watercourse buffer. The GRCA worked with private landowners to establish an additional 20 ha of wetland and 10 ha of grassland habitat.

Survey respondents noted population growth, invasive species, and climate change as stressors that are impacting natural heritage values in the Grand River watershed. Fostering individual connection to the river through outdoor environmental education and experiences were recommended to encourage stewardship.

Cultural heritage values

Greater awareness and appreciation for First Nations ways of knowing and stewarding the river are changing peoples' understanding and expectations of river heritage experiences. Survey respondents and participants in the world café forum held with the University of Waterloo were concerned that many watershed residents are disconnected from the river and suggested improved awareness and appreciation for the spiritual role of the river in First Nations' beliefs as an opportunity to reconnect.

A Heritage Working Group, formed in the 1990s to help increase community involvement and commitment to the celebration and management of human heritage resources in the Grand River watershed, held 5 workshops over the past decade, attracting hundreds of participants:

- Timeline/waterline: Grand culture at the confluence (2015). This one-day event featured speakers on the First World War and the role of community organizations in habitat restoration.
- Roots and shoots: marking the bicentennial of the founding of Dumfries Township 1816 - 2016 (2016).
- Historical Gathering and Heritage Day Workshop (2017). Held in partnership with the Mississaugas of the Credit First Nation, this three-day event showcased the First Nation's lands, waters, peoples, and role in shaping Ontario and Canada both before and after Confederation.

- Heritage Makes Sense (2018). A day-long workshop with presentations on heritage renovations, film and built heritage, cultural heritage landscape studies, and leveraging local assets to grow a cultural economy.
- Brantford: celebrating our heritage, building our future (2019).

Over the past decade, provincial legislation for heritage structure preservation and environmental protection has continued to evolve, resulting in shifting responsibilities for protection of elements of the watershed's heritage. For instance, changes to the Ontario Heritage Act in 2022 affected procedures and criteria for listing properties on municipal registers, designating properties under the Ontario Heritage Act, and establishing Heritage Conservation Districts. These changes have the potential to increase the risk of demolition or loss of built heritage in river-based communities.

Recreational heritage values

River touring, swimming, fishing and hunting, exploring trails, and water-related celebrations remain very popular throughout the watershed. As noted above, the Grand River forms the backbone of a growing network of trails, paths, and paddle routes. Investments in infrastructure and improvements in public access to recreational information through online portals and resources are connecting people to the river.

While opportunities to experience the Grand River are growing, so too are the challenges associated with providing nature-based recreational opportunities to a growing population and addressing changing environmental conditions.

Survey responses reflected the broad trends in recreation seen across the watershed – rising demand for river-based recreation, conflicting uses in shared spaces (e.g., motorized and non-motorized watercraft, conflicting trail user groups), expanding recreational infrastructure (e.g., trails) and offerings (e.g., guided tours), and the impacts of a warming climate on winter season activities (e.g., fewer opportunities for ice fishing and more opportunities for winter hiking).

Some interest holders are working towards further development of the Grand River as a destination, enhancing infrastructure (trails, access points, signage) and building linkages between river attractions and nearby amenities, while others are concerned about the impacts of growing river tourism on the environment and human safety. A balanced approach will be needed.

Grand River Conservation Areas

The GRCA owns and operates 11 fee-for-use conservation areas and the Luther Marsh Wildlife Management Area, collectively called Grand River Conservation Areas (CAs). Many of these areas have been established around the multi-purpose reservoirs and their primary purpose is to support GRCA's flood management program. Others are located directly along the Grand River for recreational purposes only. Trends noted in CA operations over the past decade illustrate some of the challenges noted by recreational interest holders and provide examples of how they are being addressed.

As the watershed's population grows, so has the demand for access to nature-based and river-based recreation and outdoor experiences. Over the past decade, the number of visitors to CAs has consistently increased as people seek open spaces to enjoy. This includes day-use visitors, over-night and seasonal campers, and boat-launch users. The number of new Canadians visiting CAs is also on the rise, along with visitors from beyond local cities, reaching as far as the Greater Toronto Area.

The COVID-19 pandemic significantly impacted CA operations, leading to the areas being busier than ever. For example, from 2019 to 2022, Laurel Creek CA saw a 102% increase in the

number of day-use visitors. Shade's Mills CA, once known as "Cambridge's hidden gem", has since had visitation numbers triple as people became more aware of the area. A strategy for managing area capacities was implemented, including identifying daily capacity numbers and establishing conservation area-specific visitation management plans. Initially focused on the pandemic and public safety, these plans are still utilized and have since evolved to focus on balancing visitor experiences and environmental sustainability. New measures have included installation of automatic entry gates at three CAs, introduction of an online reservation system at the Elora Quarry CA, and creation of a Conservation Area Activity Status website, allowing visitors to check available capacity at CAs in real-time.

Variable weather conditions and the changing climate are affecting both demand for and availability of some types of river- and nature-based recreation. For instance, beaches at CAs are becoming busier earlier in the season and remaining active later into the year. This trend is driven by warmer temperatures arriving sooner in the spring and persisting longer into the fall, effectively extending the beach season.

Warmer and fluctuating winter temperatures have resulted in a noticeable decrease in the number of days suitable for winter activities. Ice fishing is offered at three CAs; however, Belwood Lake CA reported little to no ice fishing opportunities and poor ice conditions over the past four winter seasons. Similarly, suitable conditions for skiing and snowshoeing have declined, as there is often insufficient snow cover to groom or set cross-country skiing trails or offer ski and snowshoe rentals. Consequently, Laurel Creek CA ended its ski and snowshoe rental program in 2019. Winter conditions are variable year over year, with snowshoeing, cross-country skiing, and ice fishing available at some CAs in 2024/2025. There is continued growth in more passive winter activities such as hiking and birding, as observed at Rockwood CA where visitors enjoy the trails and community firepit during the shoulder and winter seasons.

The GRCA's Conservation Areas are vital parts of the recreational infrastructure in their communities, providing locations for a wide range of activities and the opportunity to connect with nature and appreciate the beauty of the Grand River watershed. In 2024, the GRCA developed a Conservation Areas Strategy to guide land management decisions.

Integrity values

Appendix E summarizes changes to the natural, cultural, and recreational integrity values that formed part of the nomination process for the Canadian Heritage River designation. Integrity values were intended to complement the heritage values described in Appendix D. For instance, a key cultural heritage integrity value is to ensure that the visual character of the river enables uninterrupted appreciation of at least one of the periods of the river's historical importance.

The establishment of Cultural Heritage Landscapes and Heritage Conservation Districts help to protect the cultural history of areas located along the river. Over the last decade, the Black Bridge Cultural Heritage Landscape was established and cultural heritage landscape studies completed by the townships of Woolwich, Wellesley, Centre Wellington, Wilmot and North Dumfries and the cities of Waterloo and Guelph. Heritage conservation district studies were undertaken by the cities of Guelph and Cambridge.

Many municipalities are emphasizing their community's connection to the river through trails and restoration projects as well as adaptive re-use of old mills and historic buildings located along the river (i.e. Cambridge Gaslight District).

The Grand Strategy Recommendations and Current Status

The goals of The Grand Strategy for Managing the Grand River as a Canadian Heritage River (1994) are:

- To strengthen, through shared responsibility, the knowledge, stewardship and enjoyment of the heritage and recreational resources of the Grand River watershed.
- To improve the well-being of all life in the Grand River watershed.

Appendix F summarizes actions proposed in 1994 to support the conservation and celebration of the natural heritage, cultural heritage, and recreational values of the Grand River. The actions reflect the roles and responsibilities of the involved parties at the time. In the intervening 30 years, some roles have changed. For instance, changes to the Ontario Heritage Act created a stronger role for municipalities in cultural heritage planning. In contrast, amendments to the Conservation Authorities Act reduced the GRCA's involvement in natural heritage and cultural heritage planning. Finally, Regional Tourism Organizations have been established and are playing a growing role in fostering collaboration on river-based recreational and tourism issues.

Engagement to support preparation of this report and events to recognize the 30th anniversary of the designation revealed that despite changing roles and responsibilities, there are many individuals and organizations that are actively involved in the conservation, interpretation, and sharing of information about the Grand River's heritage. The information presented in the preceding sections and supporting Appendices highlight some of the many actions under way.

While much has changed in the thirty years since the Strategy was submitted to the Canadian Heritage Rivers Board in support of the Grand River's nomination, many individuals, groups, First Nations, municipalities, and agencies continue to advocate, singly and together, for the Strategy's overarching goals.

Condition of Plaques

The designation of the Grand River and its tributaries as Canadian Heritage Rivers was marked with a ceremony in Cambridge on September 26, 1994. A plaque was unveiled to commemorate the designation. Other plaques are in communities along the other four rivers of the Grand River system.

In 2024, the English, French, and Mohawk wording of the commemorative text was updated and a new Anishinaabemowin translation created. It is anticipated that in 2025, new four language plaques will be installed at Speed River and Eramosa River locations, to replace missing plaques.

Appendix G summarizes the condition of the remaining plaques.

River spotlight

Some of the actions included in this monitoring report can be experienced through engaging videos, including the following:

- Tom Ostapchuk created the short film [The Grand: From source to mouth](#), documenting his self supported source to mouth kayak trip down the Grand River.
- Two Row on the Grand – the [2024 10-day paddle experience](#).
- The New Fly Fisher highlights a Brown Trout Fishery [success story](#).
- City of Kitchener [prepares for climate change](#) by strengthening it's stormwater management system and restoring streams.

- GRCA's 2014 [Heritage River Awards](#).

Summary of Benefits and/or Detrimental Effects Since Designation

Many private organizations and public institutions continue to note the Grand River's status as a Canadian Heritage River in strategic planning, marketing, and other initiatives, reflecting the benefits that many perceive in the designation. Most of the respondents to the survey felt that the designation has been of benefit, and almost all identified multiple benefits. The most noted benefits were cultural benefits, recreational benefits, and improved knowledge and stewardship.

Of those that felt the designation had not been of benefit, some were concerned about the environmental impacts of increasing population and marketing of the river as a destination. Some noted that funding for ongoing coordination of interest holders would allow for greater collaboration and ability to capitalize on the potential benefits of the designation.

Type of Benefit	Description
Environmental Benefits	
Cultural Benefits	The promotion of the Canadian Heritage River designation by GRCA and other agencies has provided a greater awareness of cultural heritage amongst watershed residents.
Recreational Benefits	<p>The designation has piqued interest in recreational pursuits like paddling. Some paddlers report meeting visitors along the river who were attracted to it due to the designation.</p> <p>There have been more trails and river access points created to accommodate the growing number of recreationists.</p> <p>Increased interest in river-based recreation has led to the establishment of outdoor adventure companies which offer an even wider range of activities for people to explore (i.e. stand up paddleboarding and overnight camping trips) over a wide geographic area within the watershed.</p>
Improved Knowledge	A greater number of people are using the river to explore and learn about the natural environment and cultural history while gaining health benefits at the same time through paddling, hiking and other physical activities.
Monetary Benefits	<p>Increased use of the river by locals and visitors attracted to the area because of the designation increase profits for the local economy. For example, businesses such as restaurants, cafes, outfitting companies, convenience stores can all benefit from river-based tourism and recreation.</p> <p>Riverside promenades, parks and commercial venues are popular for recreational uses, but also events like festivals and weddings which stimulate the local economy.</p>
Stewardship	Trail groups and other recreation-focused organizations have continued to maintain existing trails and advocate for more of them.

Type of Benefit	Description
	Many groups organize and participate in trail and river clean up days on a voluntary basis. They also provide interpretive events to educate the public on the natural heritage features and recreational opportunities offered by the river.
Community Engagement and Collaboration	<p>The designation and resulting higher profile of the river has led to the authoring of many books and guides about the river, outdoor festivals and other events.</p> <p>A number of river management activities have been accomplished including but not limited to the Grand River Fish Management Plan (1998), Grand River Forest Plan (2004) and the Grand River Water Management Plan Update (2014). All of these have encouraged community participation and multi-agency collaboration.</p> <p>GRCA's website contains a heritage section which includes a description of the Canadian Heritage Rivers System, the designation process, the Canadian Heritage River plaques, the Grand Strategy, among other topics (www.grandriver.ca).</p> <p>The designation and the 30th Anniversary have been widely promoted in the social media posts of the GRCA and many other organizations.</p> <p>River Heritage Festival: This festival held on September 22, 2024, at the GRCA's Brant Conservation Area celebrated the river with exhibits from 17 parties, including the Conservation Authority, local municipalities, First Nations, and non-governmental arts, recreation, environmental, and cultural organizations. A couple of hundred people participated and there were opportunities to bike, hike, and paddle on the river.</p>
Education	

Overall Assessment

The conclusion of this report is that the Grand River's designation as a Canadian Heritage River should remain in place. There remains strong public interest in the Grand River and its status as a Canadian Heritage River. Many opportunities exist to continue to conserve, interpret, and celebrate the Grand's natural heritage, cultural heritage and recreational opportunities. The 30th anniversary of the designation has prompted renewal of inter-organizational connections, revealing new ways to work together to achieve the common goals of the Grand Strategy:

- To strengthen, through shared responsibility, the knowledge, stewardship and enjoyment of the heritage and recreational resources of the Grand River watershed.
- To improve the well-being of all life in the Grand River watershed.

Appendix A: Heritage River Survey



Grand
Canadian Heritage River

Rivière du patrimoine canadien
Grand

Heritage Survey - Grand River

This year marks the 30th anniversary of designation of the Grand, Conestogo, Nith, Speed, and Eramosa Rivers as a Canadian Heritage River. To maintain this special status, the Grand River Conservation Authority is preparing a monitoring report to the Canadian Heritage River Secretariat.

The purpose of this survey is to document **events, actions, studies, changes (improvements/losses) and trends in river-related cultural heritage, recreation, tourism, and natural heritage** in the Grand River watershed between 2014 and 2024.

Your information will help us develop a more complete understanding of how the heritage of the Grand River is changing, being conserved, and celebrated.

NOTICE OF COLLECTION

Pursuant to section 29(2) of the Municipal Freedom of Information and Protection of Individual Privacy Act, RSO 1990, the personal information contained on this form/survey is collected under the legal authority of the Conservation Authorities Act, RSO 1990. This information is being collected for the purpose of preparing a report to the Canadian Heritage River Secretariat. Questions about this collection of personal information should be directed to the Manager of Water Resources, Grand River Conservation Authority, 400 Clyde Road, P.O. Box 729, Cambridge, Ontario, N1R 5W6. (519-621-2761).

* Required

1. What municipality, First Nation, or organization are you reporting on behalf of? *

2. Please list any river-related events that you held between 2014 and 2024. Include the event name, date, location, who was involved, and purpose.

3. Please list any studies, plans, research or other activities that you undertook between 2014 and 2024 that were river-related or focused on features located near the rivers. Include the study name, date, purpose, and a link to related reports if available.

4. We have a couple of questions about how heritage values and resources are changing over time. To help focus your responses, tell us what aspect of heritage you are primarily contributing information on: *

- ☐ **Human/cultural heritage:** historical human use of the rivers or the influence the rivers have had on human activities (e.g., historical fishing and hunting, water use, water-based transportation, human settlement near the rivers, spiritual or cultural associations), sites, structures, artifacts
- ☐ **Recreation/tourism:** water sports, swimming, recreational fishing and hunting, land or water-based trails, parks, winter activities, nature appreciation, lookouts, cultural events and festivals
- ☐ **Natural heritage:** interaction of land and water and the hydrologic (water) cycle, aquatic and terrestrial ecosystems

5. Are historical uses of the rivers or cultural heritage resources (e.g., sites, structures, artifacts) changing for the better or worse? Please use the scales below to indicate whether you think the cultural heritage values of the Grand River are changing. *

	Declining	No change	Improving	Not sure
Resource harvesting - fishing, hunting, water use/extraction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water transport - navigation, commercial, exploration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Riparian settlement - near-river dwellings or communities, river crossings (bridges, fords, ferries)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Culture - spiritual associations, cultural expression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jurisdictional issues - conflict, boundaries, environmental regulation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Are river-based recreation or tourism changing for the better or the worse? Please use the scales below to indicate whether you think the recreational heritage values of the Grand River are changing. *

	Declining	No change	Improving	Not sure
River touring - paddling, portages, boating, individual or group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water contact - swimming, water skiing, tubing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angling and hunting - access points, fish passage, fly or ice fishing, hunting areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trails and corridors - access points, multi-purpose trails, hiking, cycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parks and wildlife management areas - camping, day use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Winter activities - snowmobiling, dog sledding, skating, skiing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nature/scenic appreciation - outdoor education, organized events, scenic vistas, lookouts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Events and festivals, cultural tours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Is the natural heritage of the Grand River changing for the better or worse? Please use the scales below to indicate whether you think the natural heritage values of the Grand River are changing. *

	Declining	No change	Improving	Not sure
Hydrology - water cycling, water quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physiography - geology, topography, landforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
River morphology - valleys, channels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aquatic ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Terrestrial ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetation - significant plant communities, rare plant species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fauna - significant animal populations, rare animal species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. If you noted improving or declining conditions in the last question, describe the reason for the change (e.g., climate change, population growth, other threat/stressor, positive management action) and any actions that have been taken in response.

9. What additional work needs to be done to conserve, interpret, or celebrate the heritage of the Grand River?

10. Has the Canadian Heritage River designation been of benefit? Please select as many options as apply.

- ☐ The designation has not been of benefit
- ☐ Yes, there have been cultural benefits
- ☐ Yes, there have been recreational benefits
- ☐ Yes, there has been improved knowledge
- ☐ Yes, there have been monetary benefits
- ☐ Yes, there has been improved stewardship
- ☐ Yes, there has been more community engagement and collaboration
- ☐ Yes, there has been more education about the river
- ☐ Yes, there have been environmental benefits
- ☐ Other

11. Please share links to documentation, files, videos or other media that showcases work, activities, stories or events on or about the Grand, Speed, Eramosa, Conestogo or Nith rivers.

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Appendix B: Chronology of Significant Events, Actions, Research, and/or Studies

2014

- The 17th Annual Heritage Day Workshop was held at the Six Nations Polytechnic in Ohsweken. The agenda was titled “Crossroads of Conflict, Path of Peace: Legacy of a Living Culture”. The focus of the day was the First Nation involvement in the War of 1812 and how it shaped First Nations Culture in the Grand River Watershed.
- A number of outdoor, natural heritage, and recreational events were held throughout the watershed such as the Guelph Rotary Forest Earth Day, Waterloo Earth Day, Guelph’s 2 Rivers Festival, Youth Outdoors Day at Luther Marsh Wildlife Management Area, Run for the Toad race at Pinehurst, Guelph’s Hillside Festival, Day of 1000 Canoes in Haldimand County and the Dunnville Mudcat Festival.
- Many cultural heritage events were also held such as Oktoberfest in Kitchener-Waterloo, Mapleton Harvest Festival, and the Wellesley Apple Butter and Cheese Festival.
- There were several organized tree planting days such as the New Forest in the City Tree Planting in Brantford and the Guelph Rotary Forest Earth Day tree planting – both in April.
- Homer Watson gallery planned special events to celebrate the Grand River’s 20th anniversary as a Canadian Heritage River. These events include, special speakers talking about the Grand River, river-related art lessons, and a special art exhibit with a theme around the Grand River.
- Creation of a Haldimand Water Festival which is focused on educating children around the impact and importance of water.
- A local history fair held in the City of Cambridge called “Shaping the Legacy of the Grand River” and focused on the flood of the Grand River in 1974. It included a showing of the film about the flood called One Day in May that examines the causes and impact of the flood
- Watershed Heritage Awards presented to those who were responsible and continue to be actively involved with the Grand River as a Heritage River for the past 20 years.
- The collaborative, voluntary Grand River Water Management Plan was endorsed by the GRCA and 15 partner agencies, including watershed municipalities, provincial ministries, one federal department and Six Nations of the Grand River. The goals of the plan are to: 1) ensure water supplies, 2) improve water quality to improve river health and the reduce the river’s impact on Lake Erie, 3) reduce flood damage potential, and 4) build resilience to climate change.
- Reconstruction of the Drimmie Dam in Elora was completed. The dam was built in the 19th century to provide power to a nearby mill. The dam and its pond have been featured in numerous photos and paintings, including an iconic work by A.J. Casson of the Group of Seven. The falls immediately below the dam are used for recreational purposes, particularly white-water kayaking and river tubing.
- A historical walking tour of the Village of Arthur, known as Canada’s most patriotic Village, occurred in October 2014 and highlighted the adaptation of murals to highlight the Village’s history.

- Rehabilitation of Bridge 8 which is a Heritage Bridge candidate located in East-Garafraxa Township.
- Repurposing and restoring of the Elora Mill in the Township of Centre Wellington began. The project included restoration of five buildings: the original mill, with a stable; the granary; a commercial warehouse structure; a mill cottage; and a brick home. The project was completed in 2018
- The Emerald Ash Borer Working Group together developed tree hazard risk zone mapping for GRCA Parks. Mapping will support and prioritize tree hazard management related to emerald ash borer impacts and other tree hazards.
- GRCA implemented a variety of management initiatives at Luther Marsh Wildlife Management Area including grassland habitat creation and mowing, plantation thinning, monitoring of marsh and grassland birds, and monitoring of Great egret Fall roosting areas.
- Planting of 95,000 trees on GRCA properties including the co-ordination of 8 volunteer tree planting events at various locations including Dumfries Conservation Area, Snyder's Flats, and Guelph Lake.
- Led tours of restoration projects on GRCA properties for several groups; including the Grand River Conservation Foundation, the Field Botanists of Ontario, and the Society of Ecological Restoration – Ontario Chapter, Waterloo Wellington Woodlot Association, University of Waterloo Water Management Course.

2015

- A large number of recreational and educational events were held throughout the watershed. These included events such as the 2 Rivers Festival in Guelph, Friends of the Grand River's Grand River Spey Clave in Brantford, Grand Opportunities Fly Fishing Forum in Fergus, Youth Outdoors Day in Grand Valley, GRCA's Trees and Trout Workshop in Burford and the Day of a Thousand Canoes in Haldimand.
- The Waterloo Wellington Children's Groundwater Festival celebrated its 20th Anniversary.
- A variety of cultural heritage events were held such as the Elmira Maple Syrup Festival, Mill Race Festival of Folk Music in Cambridge, Galt's Grandfest, Dunnville's Mudcat Festival, Riverfest in Elora, Grand River Champion of Champions Powwow in Ohsweken and Springtime in Paris Festival.
- *Doors Open* events showcasing local heritage sites were hosted by several communities within the watershed.
- The 18th Annual Heritage Day Workshop was held in Guelph with the theme *Grand Culture at the Confluence*, and highlights Guelph's connection to World War I and the Natural and Cultural History of the Guelph area.
- The Grand River Conservation Foundation celebrated its 50th anniversary. Since 1965, The Foundation has raised \$11 million in funds for conservation and outdoor education projects related to the GRCA.
- GRCA hosted 8 community tree planting events at Guelph Lake Rotary Forest, Dumfries Conservation Area and Snyder's Flats. Approximately 95, 000 trees were planted in the watershed.

- The GRCA announced that its plan to protect the sources of municipal drinking water in the Grand River watershed was approved by the Ontario Ministry of the Environment and Climate Change and will take effect July 1, 2016.
- In October, GRCA Watershed Awards were given to deserving members of the community that put their time and energy into improving the Grand River watershed.
- The former home of William Philip, the first Chair of the Grand River Conservation Commission and one of the founding members of the Grand River Conservation Authority, was designated under the Ontario Heritage Act. It is located at 65 Concession Street in Cambridge.
- The Region of Waterloo's Heritage Planning Advisory Committee completed their Public Building Inventory which was conducted to increase awareness of the buildings and support future heritage conservation efforts. The inventory includes all purpose-built public buildings with an assessment of their cultural heritage value.
- GRCA installed an Osprey Cam at Belwood Lake near Fergus drawing a lot of attention of website viewers from our watershed and beyond.
- A large cover habitat enhancement project was completed in the Grand River tailwater at the mouth of Carroll Creek near Inverhaugh. The project was implemented in partnership with the Ontario Ministry of Natural Resources and Forestry (MNRF) with funding from the Department of Fisheries and Oceans Canada, the MNRF, the Grand River Conservation Foundation, the Ontario Federation of Anglers and Hunters, the Friends of the Grand River, as well as the Grand River Fisheries Management Plan Implementation Committee.
- GRCA staff participated in fish stocking efforts in the Grand River and Conestogo River tailwaters. Led by the MNRF as well as Friends of the Grand River, approximately 40,000 brown trout yearlings were stocked.
- Snyder's Flats Management Plan was completed. The plan provides recommendations for the future management of the property and outlines existing uses, natural hazard and heritage features and issues. The plan will guide management efforts on the property for a 10-year period.
- A fisheries assessment was completed on McKenzie Creek with electrofishing being completed upstream and downstream of the Victoria Mills impoundment. Surveys were completed by GRCA staff, members from Six Nations and MNRF staff.
- GRCA installed an interpretive kiosk at Luther Marsh to provide information on the Grand River headwaters area. The signage included a description of the Canadian Heritage Rivers designation.
- The Port Maitland "On the Grand" Historical Association created a cairn at Port Maitland commemorating 1) the Grand River Naval Depot at Port Maitland, 2) the area's commercial fishing history, 3) the Welland/Feeder Canal, and 4) a recent archeological assessment completed at Port Maitland.
- Grand River Access Point Standards Manual and Pilot Design Plans: In October 2015, RTOs 1, 3, and 4, with the help of BC Hughes, developed the Grand River Access Point Standards Manual & Pilot Design Plans. This guide was created to establish consistent standards for enhancing existing river access points and provide a framework for developing new ones. The manual aimed to improve wayfinding and signage, on-site

parking and drop-off routes, access into the river, and add standards for amenities such as accessible comfort stations, benches, bike and canoe racks, and waste bins.

- The City of Waterloo completed stream restoration projects in 2014/15, including the McCrae Park reach of Clair Creek and Laurel Creek downstream of Weber Street. Clair and Laurel creeks are tributaries of the Grand River.

2016

- Family Ice Fishing Days and Winter Family Fun Days were held in locations throughout the watershed. Rockwood Conservation Area allowed visitors to experience horse and wagon rides, skating, hiking, and snow shoeing.
- The Grand Strategy Heritage Working Group partnered with the City of Cambridge to host their 19th Annual Heritage Day Workshop. The theme was *Roots and Shoots: Marking the Bicentennial of the Founding of Dumfries Township 1816 – 2016*. Cultural heritage speakers provided insight into a variety of topics including First Nations history and municipal heritage initiatives.
- Thousands of trees were planted throughout the watershed by many community groups such as Brant Tree Coalition, Trees Ontario and Trees for Guelph.
- In April, high school students, local environmental leaders, teachers and provincial ministerial staff joined The Honorable Elizabeth Dowdeswell, Lieutenant Governor of Ontario, in Brantford to learn about the environmental significance of the Grand River and the Great Lakes.
- The annual 2Rivers Festival was held in Guelph through May and June featuring a variety of natural and cultural heritage events.
- A number of Children's Water Festivals were held throughout the watershed such as the 11th annual Brantford-Brant Children's Water Festival, the Haldimand Children's Water Festival and the Waterloo-Wellington Children's Groundwater Festival.
- Two Row on the Grand was held for three days in July. Participants paddled along the Grand River from Paris to Chiefswood. The purpose of the event was to join members of native and non-native communities together and evoke the Two Row Wampum belt.
- The Region of Waterloo and City of Kitchener unveiled a new commemorative plaque to celebrate the importance of the Huron Road Bridge on July 9. The bridge spans Schneider Creek and was constructed in 1930. It is the Region's first and only example remaining of a concrete bridge constructed with visible supportive steel I-beams. The plaque traces the story of this crossing at Schneider's Creek from the construction of the Huron Road in 1828-29, to the recent rehabilitation of the bridge in 2012.
- Guelph's first Heritage Conservation District (HCD), the Brooklyn and College Hill Heritage Conservation District was established in January. THE HCD designation applies to 160 properties and the area is bisected by the Speed River.
- In November, the City of Kitchener approved a Built Heritage Emergency Management policy which will now require that where a heritage property becomes unsafe from events such as fires or floods, a structural engineer must review the case before the city can proceed to demolition. In addition, the city will be required to consider heritage concerns along with public safety issues prior to demolition.
- The Grand River Tailwater Habitat Enhancement Project commenced a 2-year project to implement a third fish habitat restoration site.

- Grand River Style and Signage Guide: In 2017, the RTOs and the GRCA collaborated to create the Grand River Signage and Style Guide, aimed at establishing a consistent and uniform identity for all access points along the Grand River that would be representative of a signature outdoor recreation experience. The signage standards guide included template signs that were implemented at the Wilson's Flats pilot site in the Township of Centre Wellington.
- Friends of the Grand River stocked brown trout in the Grand River and Conestogo River tailwaters.
- Restoration and monitoring activities were conducted on Mill Creek – a tributary of the Grand River - through the Stewardship Rangers summer program.
- The Black Bridge Cultural Heritage Landscape Technical Study was completed in January. the Region of Waterloo approved Official Plan Amendment No. 15, establishing the first Cultural Heritage Landscape in Cambridge. The Black Bridge cultural heritage landscape is significant, and the landscape is connected to the industrial, agricultural, transportation, recreational, and natural history of the community and contributes to a strong sense of place.
- An assessment of current habitat conditions in the Middle Grand River began and a study to identify best alternatives for enhancing aquatic habitat opportunities was initiated.
- Broad-scale fisheries monitoring was conducted at Belwood Lake by the Ontario Ministry of Natural Resources and Forestry.
- Monitoring of re-introduced brook trout was conducted in the Grand River by the Ted Knott Chapter of Trout Unlimited Canada.
- Forest restoration activities were carried out on various GRCA properties. The total number of trees planted on GRCA lands in 2016 was almost 24,535 and resulted in the creation of 14 ha of new forest area. Volunteers took part in several tree planting events held at various locations including Dumfries Conservation Area, Snyder's Flats, Guelph Lake, Shade's Mills, Laurel Creek, Belwood Lake, and Conestogo Lake.
- Invasive species control at Dickson Wilderness Area, including 2 volunteer events
- Haldimand County completed a Tourism Strategic Action Plan that identifies the Grand River as a key strength.
- The City of Waterloo completed restoration of Forwell Creek from Blue Springs Drive to King Street.
- The City of Kitchener established a Habitat Banking Arrangement with the Department of Fisheries and Oceans to track additions and losses of stream habitat resulting from infrastructure projects. The City also naturalized about 1.8 km of Filsinger Creek, replacing a concrete-lined channel with a wider, naturalized channel and habitat improvements.

2017

- The Heritage Working Group partnered with the Mississaugas of the New Credit for their 20th Annual Heritage Day event. The *Historical Gathering and Heritage Day Workshop*

was held in February in Hagersville and showcased the Mississaugas of the New Credit and their contribution and role in shaping Ontario and Canada over the past 150 years.

- Doors Open Waterloo Region offered free heritage and architectural tours on September 16th.
- A number of festivals were held including the Wellesley Apple Butter & Cheese Festival, K-W Oktoberfest and the Christkindl Market in Kitchener.
- Two Row on the Grand was held in July: The canoeing event occurs annually and is a reminder of the Two Row Wampum which was a peace treaty between native and settler communities.
- The 2Rivers Festival featured 16 heritage and environmental events that included a celebration of the 120th anniversary of the Gow Bridge and the 25th anniversary of the Covered Bridge in Guelph.
- A fundraising day of biking, hiking and walking to support the Kissing Bridge Trailway, spanning Wellington, Waterloo and Perth was held on May 13th.
- Friends of the Grand River hosted The Grand Opportunities Fly Fishing Forum at Belwood Lake Park featuring fly fishing seminars and demonstrations along the banks of the Grand River. Many other fishing events were offered throughout the watershed such as the Shimano Take a Kid Fishing Day at Belwood Lake Park and the Grand River Bass Derby
- Youth Outdoors Day was held at Luther Marsh Wildlife Management Area in Grand Valley for youth ages 9 to 15. The event is designed to introduce youth to the outdoors through fun activities and interactive learning stations
- The GRCA launched Canada 150 celebrations on Earth Day at the Guelph Rotary Forest with the planting of a maple grove shaped like a maple leaf which will be visible from the sky. Each year, the Rotary club's Earth Day tree planting event sees hundreds of volunteers head out to areas near Guelph Lake Conservation Area to plant a variety of trees, working toward the project goal of planting 60,000 trees by 2020.
- Other tree planting events were also held throughout the watershed such as the 6th Annual Brantford Community Tree Planting and the Upper Grand Trailway Tree Plant.
- It was announced in August that Wellington County would be receiving funding from the federal government under the Canada 150 Community Infrastructure Program, to improve the Trestle Bridge Trail's pedestrian bridges. The Trestle Bridge sits high atop the Grand River and connects to the Wellington County Museum which is a national historic site.
- Development of the new Gaslight District in Galt began. The development includes adaptive reuse of old industrial buildings, previously known as "Southworks" that were first used as a machinery factory in 1859, into a commercial center and the construction of a new condominium building. It will include two residential towers, an event hall, stores, art and dining spaces and aims to be a hub for community and culture. The developer plans to preserve as much of the historical elements of the buildings as possible and aims to incorporate appreciation of the Grand River in the formation of the community.
- The Friends of the Grand and the Ministry of Natural Resources and Forestry released 23,000 brown trout into the Grand River. The fish are released at about 30 sites between

the Shand Dam at Lake Belwood through the communities of Fergus and Elora, to the Highway 86 bridge at West Montrose. The fish have been stocked annually since 1989, and has resulted in a “world class” brown trout tailwater fishery that has had national and international attention.

- The Grand Watershed Trails Network was formally incorporated as a Not-For-Profit Corporation in December. The goal of the GWTN is to connect people with communities along with the heritage, cultural and outdoor experiences that exist throughout the Grand River Watershed by linking trails from the headwaters of the Grand to its mouth at Lake Erie.
- A Cultural Heritage Landscape Study was initiated for the townships of Woolwich and Wellesley in the Region of Waterloo. The first stage involves an inventory of heritage features and will be accomplished through public participation (surveys, interviews, etc.). The inventory is being carried out by the Heritage Resource Centre at the University of Waterloo. The City of Waterloo initiated a Cultural Heritage Landscape Study where several candidate areas will be considered for designation.
- The City of Guelph began a Cultural Heritage Action Plan to identify cultural heritage landscapes and develop actions to ensure cultural heritage resources are conserved. Approved by city council in 2021, The CHAP identified the following three candidate cultural heritage landscapes for a heritage conservation district study: Exhibition Park, St. George's Park and the Ward West.
- As part of an archeological assessment of the project area for the new Highway 7 in Kitchener, Indigenous items were uncovered. Spearheads and food preparation items about 2,000 years old were found along the Grand River where a new bridge is to be located.
- The Ontario Ministry of Natural Resources & Forestry conducted broad-scale fisheries monitoring at Guelph Lake and Conestogo Lake.
- The public planning process to develop a fisheries management plan for the province's Fisheries Management Zone 16 was launched by Ontario Ministry of Natural Resources and Forestry.
- A multi-agency Asian Carp Response Simulation exercise was held in Dunnville to observe the coordination of protocols of different agencies as well as demonstrating the techniques used to search for and capture Asian carp, as well as making sure emergency preparedness techniques were ready.
- The total number of trees planted on GRCA lands in 2017 was almost 24,535 and resulted in the creation of 14 ha of new forest area. Volunteers took part in several tree planting events held at various locations including Dumfries Conservation Area, Guelph Lake, Laurel Creek, Belwood Lake, Chilligo, and Conestogo Lake.
- The City of Waterloo completed restoration of Clair Creek at Coleridge Drive.

2018

- The Niska Road Bailey Bridge was removed by the 31 Combat Engineer Regiment and the Canadian Army the week of March 12th. Bailey bridges are pre-fabricated wood and steel truss structures developed by the British during the Second World War and used extensively by Allied forces. The bridge was not a designated heritage

feature, but had significant heritage importance to the community. As a result, some components of the bridge will remain with the city, which plans to repurpose them and keep them in the community.

- The City of Waterloo and the Grand Strategy Heritage Working Group hosted their 21st Annual Heritage Day workshop on February 16th, revisiting a previous theme of “Heritage Makes \$ense”. The workshop explores how cultural heritage celebrates one’s roots, strengthens community identity and has economic benefits for both individuals and communities.
- The annual 2Rivers Festival was held in Guelph in May and June. It included 24 events focused on arts, culture and indigenous knowledge related to the Speed and Eramosa Rivers – both designated Heritage Rivers and tributaries of the Grand River.
- Fly Fishing Canada’s 16th Annual National Championship was held from June 6th to 8th at Belwood Lake and included the release of 1,135 trout. An annual Conservation Symposium was held concurrently with sessions focused on conservation in the Grand River and surrounding watersheds.
- The annual Grand River Bass Derby was held on July 7th to 8th from Paris to Belwood. It is one of the longest-held bass derbies in the country. The derby is held during Ontario Family Fishing Week. Fishing licences are not required making it widely accessible.
- The annual Grand River ‘Champion of Champions’ Powwow was held in Ohsweken from July 27th to 29th. The PowWow showcased and promoted Indigenous heritage through events focused on their music, dance, arts and crafts.
- Riverfest Elora was held August 17th to 19th and included musical performances on the banks of the Grand River.
- From September 15th to 29th, Indigenous and non-Indigenous watershed residents walked the length of the Grand River from its source in Dundalk to its mouth in Haldimand. The event is intended to honour the water and connect all peoples to creation and Walk involves carrying water in a copper pail for the full length of the walk to honour the sacredness of the river.
- Doors Open events were held throughout the watershed showcasing heritage buildings and culture.
- The Grand River Fisheries Management Plan (GRFMP) celebrated its 20th Anniversary. The GRFMP Committee has been working to improve river health for two decades leading research projects and events such as river cleanups, planting events and annual fish stocking days.
- The Ministry of Tourism announced a multi-million-dollar project to improve access to the river for paddlers. The project will make the Grand River more accessible by upgrading 32 canoe access points along the river from Belwood to Port Maitland. The upgrades will include such improvements as parking, washrooms, canoe racks, picnic areas, information kiosks and signage.
- The renovated and restored Old Post Office, a designated heritage building and National Historic Site in Galt, re-opened on July 6th. It now houses high tech learning and creating spaces. It also houses Canada’s first all-digital library for every age, a restaurant and an outdoor seating area overlooking the Grand River.

- A pedestrian bridge over the Grand River opened in Galt on May 26th. It offers scenic views of the historic downtown, and increases connectivity to the river-scape and improves pedestrian and cycling connections within downtown Cambridge
- On June 29th, the Indigenous Reconciliation Youth Art Project was unveiled. The 50-foot mural in downtown Galt depicts the many historic stages of Indigenous culture in Cambridge.
- A water budget was completed for Whiteman's Creek, a popular fishing spot. The budget shows how much water enters the watershed, how it moves through and how much leaves. It is helpful in identifying areas within the watershed where water demand could be high relative to supplies and could impact fish and other biota.
- GRCA conducted park surveys designed to capture the opinions of visitors and help with improvements to facilities and recreational experiences.
- The City of Waterloo identified significant areas of cultural value in their Cultural Heritage Landscape (CHL) Inventory. The Grand River Corridor was identified as a CHL for the role it played in the formation of the city and its associative value to residents.
- The City of Cambridge initiated a Cultural Heritage District Study for the Galt area. The study will identify properties in need of heritage protection. This area of Galt is located right along the Grand River and contains historic buildings as well as a flood wall.
- The Wellington County Natural Heritage System Mapping Project was completed. The final report and mapping identifies core natural heritage areas and potential stewardship areas. Natural heritage areas include core features such as wetlands, woodlands, and aquatic habitat.
- Forest restoration activities were carried out on various GRCA properties in 2018. The total number of trees planted on GRCA lands in 2018 was almost 16,685 and if successful will lead to the restoration of 13.2 ha of forest in the watershed. Volunteers took part in several tree planting events held at various locations including Dumfries Conservation Area, Guelph Lake, Laurel Creek, Pioneer Tower and Shade's Mills.
- Signed a 20-year meadowlark habitat compensation agreement with the City of Brantford and began year-one work at Eagles Nest and Brant CA. This included tree removal, treatment of invasive vegetation, and monitoring at Birkett Lane, and treatment of invasive vegetation and monitoring at Brant CA.
- Development of a Species at Risk Act (SARA) Section 11 Conservation Agreement between Fisheries and Oceans Canada and the Grand River Conservation Authority. Along with the Lower Thames Valley Conservation Authority these agreements are the first in Ontario to be developed with conservation authorities. The purpose of this agreement will support a framework within which DFO and GRCA can cooperatively ensure a coordinated and focused approach to the delivery of aquatic species at risk protection in the Grand River watershed.
- The City of Waterloo completed restoration of Colonia Creek from Lee to Castlefield.
- The City of Kitchener rehabilitated Balzer Creek, consolidating a braided channel into a meandering channel and moving it away from an exposed trunk sanitary sewer.

2019

- In February, the 22nd Annual Heritage Day Workshop was hosted by the City of Brantford the Grand Strategy Heritage Working Group. The theme of the day was “Brantford: Celebrating our Past, Building our Future” and features three discussion panel topics, including industrial history, Indigenous and military history, and cultural revolution. GRCA’s Chair, Helen Jowett opened the day with a presentation celebrating the 25th anniversary of the Heritage River designation.
- Heritage Wilmot hosted an event called “Celebrating Mills from our Past” in New Dundee in February. Historical groups and Wilmot residents provided a look-back at the numerous mills set up along the township’s streams and rivers.
- Doors Open was held in the Region of Waterloo in September and included 43 sites across the region. The focus was on water this year with some topics that relate to the Grand’s heritage river designation such as watershed management, recreation and bridges.
- The annual 2 Rivers Festival was held in Guelph in May and June. It included 25 events related to the Speed and Eramosa Rivers such as nature walks, riverside yoga and a sacred water walk.
- The All Nations Grand River Water Walk was held in June. The walk was based on the Anishinaabe ceremonial water teachings.
- The annual Grand River ‘Champion of Champions’ Powwow was held in Ohsweken in July. The PowWow showcased and promoted Indigenous heritage through events focused on their music, dance and arts and crafts.
- Riverfest Elora was held in August and included a weekend of musical performances on the banks of the Grand River.
- The Onkwehón:we Festival was held in Brantford at the Woodland Cultural Centre in June and focused on Haudenosaunee artistic and cultural themes that included dance, music, film and other expressive mediums.
- A Survivors Gathering was held in August in Brantford in recognition of those First Nations Survivors who suffered and persevered through generations of abuse, loss of language and loss of culture. The event included a healing walk from the steps of the former Mohawk Institute to the end of the lane way. It also included workshops.
- The Kissing Bridge in West Montrose, which spans the Grand River in the County of Woolwich will be featured on a new stamp from Canada Post. The bridge was opened in 1881 and is a well-known designated heritage feature.
- The Growth Plan for the Greater Golden Horseshoe introduced strengthened cultural heritage policies which municipalities are now considering in their official plan conformity exercises. The amended version of the plan also includes more requirements for indigenous consultation.
- The final print issue of Grand Actions was published. Originally known as a “Grand Strategy”, which supported the CHRS designation, it was published up to six times each year and focused on actions of communities and GRCA that support the river. In 2020, the GRCA plans to launch a new digital platform that will provide more timely, modern and engaging content.

- The Grand River Fisheries Management Plan Implementation Committee coordinated the stocking of fish in the Grand and Conestogo Rivers which supports recreational fishing.
- Many municipalities in the watershed commenced Cultural Heritage studies to identify properties/areas in need of protection. Examples include: the Centre Wellington and the cities of Guelph and Cambridge. Many of these studies propose to include the Grand River and its major tributaries as Cultural Heritage Landscapes.
- Along with its watershed partners, GRCA finalized a State of the Watershed Water Resources Report which outlines the collective efforts of achieving the goals that are laid out the Grand River Water Management Plan. A section of the report addresses the links between investments in best practices like wastewater treatment and stormwater management, improved the health of the river system and the increase in recreation-based use of the rivers. The Canadian Heritage River System designation is supported in the report.
- The lower part of the Grand River was assessed for invasive Asian carp during the summer, which is important to understand in order to maintain the recreational fisheries.
- Forest restoration activities were carried out on various GRCA properties in 2019. The total number of trees planted on GRCA lands in 2019 was 23,788 and if successful will lead to the restoration of 37.05 ha of forest in the watershed. Volunteers took part in tree planting events held at Guelph Lake, and Laurel Creek.
- The City of Waterloo completed restoration of parts of Maple Hill Creek.
- In 2019, the GRCA completed reconfiguration of the Elora Gorge Conservation Area campground, including addition of 50 new campsites to help provide increased overnight camping opportunities in the conservation area.

2020

- There were very few events held in 2020 due to government restrictions related to the COVID-19 pandemic.
- For the first time in over two decades, the Heritage Working Group did not host a workshop on Heritage Day in February.
- The Grand River Bass Derby was cancelled, but the organizers encouraged watershed residents to get out fishing in a responsible, socially distanced way.
- Some events went digital including Doors Open which offered people the chance to do virtual tours of many historic spaces in the watershed, including a tour of Shand Dam on the Grand River.
- The 2 Rivers Festival in Guelph moved their event online offering a variety of sessions to participants such as a virtual Sacred Water Walk, an Anishinaabe ceremony, and a filmed reading of The Water Walker which was inspired by the life of Josephine Mandamin.
- The annual Grand River 'Champion of Champions' Powwow was held virtually. The celebration showcases and promotes Indigenous heritage focused on their music, dance and arts and crafts.

- COVID-19 government issued restrictions limited the ability of many organizations to participate in projects in 2020. However, some previous projects concluded and project planning for future activities did occur.
- The GRCA completed subwatershed characterization reports for each of the Grand's major subwatersheds. The reports provide information and mapping on the natural heritage features and functions of each subwatershed. Reports were compiled through a comprehensive review of existing information from a variety of sources. Consultation occurred throughout the project and included workshops attended by representatives of member municipalities, provincial and federal agencies, Six Nations of the Grand River and environmental non-governmental organizations. The 11 NHS characterization reports complement other management plans compiled by the GRCA, including the Water Management Plan, Fisheries Management Plan and Forest Management Plan and support the CHRS designation.
- As part of the continued habitat restoration efforts at Taquanyah Conservation Area along the lower Grand River, approximately 12 ha of non-native invasive phragmites was treated. This multi-year project to control phragmites serves two purposes: (1) improves habitat for the endangered Virginia Mallow plant populations found on the property and (2) contributes to the longer term 'Taquanyah – The New View' restoration plan that decommissioned the reservoir and constructed wetland cells between 2004-2012.
- A draft Terms of Reference for the Wellesley Pond Enhancement Project was prepared. The document identifies four Partner Organizations: the GRCA, Township of Wellesley, Wellesley Friends of the Pond, and Wellesley Lions Club and is intended to reaffirm the goals and objectives of the project which is to improve the health and biodiversity of Wellesley Pond. The pond is located along Firella Creek, a tributary of the Nith River.
- A number of Class Environmental Assessments occurred in 2020 to assess future plans for heritage bridges. Some of these included decisions to protect the structures.
 - The Conestogo Bridge, which was built in 1886 and is one of oldest steel truss bridges in Canada is now proposed to be rehabilitated for a 15 year life extension, then closed and left in place.
 - The Winterbourne Bridge was built in 1913 and is the oldest camelback truss bridge in the area and one of three remaining truss bridges in Woolwich. The EA determined that the bridge will be closed and left in place. In the long-term, opportunities for funding will be explored to rehabilitate the bridge.
 - The Chamber's Bridge, built in 1930 and also a truss bridge was determined to be in need of removal. It may be placed elsewhere or commemorated with a plaque.
- A number of municipalities in the watershed have developed tourism plans to deal with the increase in demand from those seeking to make use of the Grand River whether for water-based activities or "insta trips". Expectations are that the demand on the river and the river-based communities will continue into 2021 since the pandemic forced changes to the way people live, work and play.
- A number of municipal heritage studies were underway in 2020 including the Galt Heritage Conservation District Study and the Wellington County Cultural Heritage Study. GRCA staff are working with the municipal heritage planners managing these projects to

incorporate the CHRS designation into their plans while also identifying flood infrastructure needs.

- Completed the final year of a five year vegetation monitoring for the bobolink compensation project at the Morton Property. In 2016 the GRCA had been asked to enter into an agreement with a private developer to facilitate habitat compensation for Bobolinks relating to provisions of the Endangered Species Act.
- RTO4 with the City of Kitchener, GRCA and other partners, completed improvements at the Idlewood Creek river access point in the City of Kitchener.
- The City of Waterloo completed stream restoration for Laurel Creek through Waterloo Park.

2021

- The COVID-19 pandemic resulted in limited opportunities for major planned events in 2021.
- The Grand River Bass Derby was cancelled again in 2021, but the organizers encouraged watershed residents to get out fishing in a responsible, socially distanced way.
- Doors Open went digital again and offered people the chance for people to explore a number of heritage buildings such as the Cold War bunker along the Grand River in Kitchener and the North House at Rare Charitable Research Reserve in Blair along the Speed River.
- The 2 Rivers Festival in Guelph offered both online and in person events in 2021, providing a variety of sessions to participants such as a Sacred Water Walk (an Anishinaabe ceremony), a Medicinal Plant Walk, yoga sessions and historical walking tours.
- The annual Grand River 'Champion of Champions' Powwow was cancelled in 2021. In prior years, the event showcased and promoted Indigenous heritage focused on their music, dance and arts and crafts.
- The Grand River Float Day offered hundreds of people a chance to float down the Grand River tied together on inflatables.
- COVID-19 limited the ability of many organizations/groups to participate in projects again in 2021.
- A number of Class Environmental Assessments occurred in 2021 to assess future plans for heritage bridges. Some of these included decisions to protect the structures.
- It was decided that the Winterbourne Bridge in Woolwich will be rehabilitated and converted to a pedestrian/cyclists only bridge.
- GRCA conservation areas opened up fully in 2021 allowing for many recreational activities to resume.
- The increase in river-based tourism continued in 2021 at a higher rate than pre-pandemic. Some municipalities had to make infrastructure changes (changes to traffic, parking and river access points) and post signage to deal with the influx.
- Two areas (11.6ha) on GRCA land near Guelph Lake were reforested in spring 2021. A nearby section (4.3 ha) of Guelph Lake Rotary forest was planted with 6800 seedlings.

- As part of the early detection and control efforts for invasive phragmites at Luther Marsh Wildlife Management Area, a headwaters area of the Grand River, two days of treatments targeted existing patches of invasive phragmites and surveillance for new patches is ongoing.
- Five days of freshwater mussel sampling were carried out on Grand River tributaries including the Speed River, Whiteman's Creek, Fairchild Creek, Laurel Creek, Hopewell Creek and D'Aubigny Creek. A total of 12 species were identified including one aquatic species at risk.
- The Wellington County Cultural Heritage Study was completed and Council recently directed staff to proceed with an Official Plan Amendment to identify a total of 18 significant CHLs, some of which are located along the Grand River. GRCA staff are working with the municipal heritage planners managing these types of projects to incorporate the CHRS designation into their plans while also identifying flood infrastructure needs.
- Virtual Open Houses were held to engage the public on the Cultural Heritage Landscape Study in Wilmot and North Dumfries Townships.
- Conifer plantation thinning completed at three properties, totaling 50 hectares. A 5-year forecast to guide plantation management on GRCA lands has been prepared. GRCA's primary objective in thinning plantations is to promote the conversion of these planted forests toward more diverse and structurally complex forests. This both improves habitat quality and the resilience of these forests to impacts from insects, diseases and climate change.
- Planting of over 18,000 trees and shrubs, in areas totaling 12ha, on GRCA properties to support watershed reforestation.
- Aerial applications of Btk insecticide for control of LDD (*Lymantria dispar dispar*) moth were coordinated for portions of Pinehurst and Brant Conservation Areas – 70 ha total;
- A RFQ process was developed to support grassland habitat vegetation management at Luther Marsh Wildlife Management Area and Guelph Lake Conservation Area, enabling 35ha of field cutting/woody shrub control and 11ha of herbicide treatment this year;
- GRCA's Natural Heritage department finalized the internal document Guidance for Reducing Risks to Migratory Birds during Vegetation Management Operations. This guidance provides mitigation measures for reducing risks to migratory birds that could potentially occur during grass mowing and trail maintenance activities on GRCA lands.
- The City of Waterloo completed stream restoration for Laurel Creek from Regina Street to Weber Street.
- In 2021, the GRCA's Shade's Mills Conservation Area introduced a boat concessionaire that provides canoe, kayak and stand-up paddle board rentals, leading to increased capacity to offer water-based recreation services.
- The City of Kitchener rehabilitated Shoemaker Creek, replacing concrete channel with a naturalized channel and habitat improvements.

2022

- After multiple years of delayed events due to the COVID-19 pandemic, many Grand River Conservation Areas were able to operate at full capacity in 2022, offering camping, hiking, paddling, fishing and other outdoor recreation activities; and hosted a wide-range of community, school and fundraising events.
- Guelph Lake Conservation Area hosted the annual Hillside festival in July of 2022; at full capacity for the first time in two years, celebrating cultural music, diversity, and geography.
- After a two-year hiatus, The Belwood Lions Club hosted the 40th annual Pike Derby at Belwood Lake Conservation Area for local and out-of-town anglers.
- 6 Conservation Areas were able to offer boat rentals in 2023 including canoe, kayak, stand up paddleboards and peddle boats, providing water sport activities within the reservoirs and along the Grand River.
- Doors Open events were held virtually within the Grand River watershed, featuring the Elora Gorge, 6 sites in Guelph and 34 sites in the Region of Waterloo. These included the historic Blair Sheave Tower, the Brubacher House Museum, and the Canadian Pacific Railway Caboose.
- Six Nations of the Grand River offered virtual tours of the Woodland Cultural Centre, the site of the Mohawk Institute, a former residential school that operated from 1885 to 1970. The tour provided the history of the institution over its 140 year history. Viewers will get to see the different rooms in the school, from the girls' and boys' dormitories, the cafeteria, laundry room, and other rooms throughout the building, as well as hear interviews from five Survivors of the Mohawk Institute.
- The 2 Rivers Festival in Guelph offered both online and in person events in 2022, providing a variety of sessions to participants such as a Medicinal Plant Walk, a Getting to Know your Treaty Partner event, and a 2 Rivers BIPOC Paddle.
- The annual Grand River 'Champion of Champions' Powwow resumed in 2022 after a 2-year hiatus. The event moved to the Ohsweken Speedway and showcased and promoted Indigenous heritage focused on music, dance, and arts and crafts.
- The GRCA undertook erosion control along the Eramosa River through Rockwood Conservation Area to prevent further erosion hazards. The boat launch area at Rockwood Conservation Area was upgraded, featuring a new assisted canoe and kayak launch as well as shoreline improvements to help prevent further erosion. Docks and canoe launches were installed in new locations at Luther Marsh Wildlife Management.
- The Elora Cataract Rail Trail pilot project improved the conditions of the Elora Cataract Trail and increased hikers' scenic appreciation and experience. This trail connects the historic town of Elora, through the community of Fergus and past Belwood Lake.
- GRCA improved trail accessibility on the Rotary Club Trail along the Speed River between Victoria Road North and the Guelph Lake Dam.
- The Township of Woolwich partnered with the West Montrose Family Camp and RTO4 to create a new river access point in West Montrose.
- 2022 saw the return of GRCA's Mill Creek Rangers, a high school and university work and enrichment program. For over 20 years, this program has focused on improving Mill

Creek, a tributary of the Grand River, and providing aquatic restoration experience to its participants. This year, the crew dismantled 4 beaver dams, built seven flow deflectors, and cleared over 1000m of stream channel of fallen trees and accumulated woody debris and assisted with freshwater mussel surveys on the Speed River and Fairchild Creek and bathymetry work on Victoria Mill Pond reservoir.

- The stocking of fish to support recreational fishing in the Grand and Conestogo Rivers, and other locations, continues to be implemented by the Ontario Ministry of Natural Resources and Forestry with the assistance of GRCA staff.
- This was the final year of tree planting at the Guelph Lake Rotary Forest, a 14 year partnership with the Rotary Club of Guelph which established 40 ha of forest near Guelph Lake. This was a forest planted completely “by the community, for the community.”
- Four days of freshwater mussel sampling were carried out by GRCA on Grand River tributaries including the Speed River, Fairchild Creek and Rogers Creek. A total of 15 species were identified including 3 species at risk.
- The Grand River Bass Derby event was discontinued. However, funds raised from the Derby are currently being used to help develop and improve public access points along the Grand River.
- The City of Cambridge’s Galt Core Heritage Conservation District Plan development began. The study area included lands along the Grand River through the City’s downtown. It identified heritage assets and includes policies for their conservation including features, structures and streetscapes that represented Galt’s history as a key industrial centre on the Grand River corridor and Grand Trunk Railway network.
- A Cultural Heritage Landscape (CHL) Study conducted by Centre Wellington is still ongoing. The study area is located along the Grand River and in 2022, identified 18 significant CHLs for designation. The next phase of this project (2023) is to formally recognize these in the Township’s Official Plan.
- The Bridge Street bridge has been evaluated by the Township of Wilmot through a Schedule B Class EA. The bridge is being replaced and the municipality plans to relocate it pending determination of a suitable site. The bridge is a steel pratt camelback through truss and was built in 1913. It crosses over the Nith River and is listed in the Grand River Watershed Heritage Bridge Inventory.
- The “Kissing Bridge” in Woolwich is a covered, timber bridge with steel reinforcement. It was built in 1881 crossing the Grand River and is designated under Part IV of the Ontario Heritage Act. It is a popular destination for tourists and heritage enthusiasts. Plans for rehabilitation are being evaluated by the Township and Region of Waterloo.
- The Grand River Conservation Authority (GRCA) initiated development of new plans and strategies required by the Conservation Authorities Act, including a Conservation Area Strategy that will inform the Authority’s decision making related to the lands it owns and controls. Also under development are natural hazard asset management and operational plans, and a watershed resource management strategy. These new plans may influence GRCA’s management of lands that are used for recreation and how communities are protected from flooding.

- The GRCA is updating its Strategic Plan to include a new priority: Enhancing Indigenous awareness, understanding and relationships. As these relationships evolve, there may be new opportunities to celebrate the Indigenous heritage of the Grand River watershed.
- GRCA has initiated the Bridgeport Dyke Rehabilitation and Capacity Improvement Class Environmental Assessment to explore options to rehabilitate the existing Bridgeport Dyke. The community of Bridgeport is located along the bend of the Grand River in the City of Kitchener. The former village has a history of flooding, with serious flooding reported in 1948, 1954 and 1974, when the 1950s-era earth fill dike was overtopped. The current dyke protects a mix of recreational, residential, commercial, and industrial lands. Adaptation to flooding is one of the outstanding human heritage values of the Grand River watershed.
- GRCA has initiated flood damage assessment studies for Grand Valley, Waldemar and Drayton. These three communities are high-risk flood damage centres, with historic development in the floodplain. Adaptation to flooding is one of the outstanding human heritage values of the Grand River watershed.
- The GRCA conducted a hunting review of GRCA-owned lands included in the recreational hunting program which resulted in the addition of 186 acres to the program, creating increased opportunities for local and out-of-town hunters.
- The Survivor's Secretariat is working to uncover, document and share the truth about the Mohawk Institute, an Indian Residential School located in Brantford. The Survivors' Secretariat is a Survivor-led initiative established in 2021. The Secretariat coordinates protocols and processes associated with death investigations and facilitates the gathering of community and Survivor statements as they work to document and share the truth about what happened at the Mohawk Institute during its 136 years of operation.
- Conifer plantation thinning completed at six properties, totaling 126 hectares;
- Ongoing control of *Phragmites australis* at Luther Marsh, including the first year of over-water treatments on difficult to access patches on the main reservoir and first and follow-up treatments on 28 patches spread across Luther's core properties;
- 34 hectares of shrubland habitat north of Wellington County Road 15 were mowed to increase the amount of grassland habitat at Luther Marsh Wildlife Management Area;
- 1.5 hectares of shrubland and 190 metres of hedgerow habitat containing invasive, dead, or decaying vegetation were mowed to augment the overall size and connectivity of existing grassland areas near Damascus Reservoir;
- Natural Heritage staff worked with Guelph Lake Nature Centre staff and three local school classes to plant 100 two-gallon pots of native tallgrass plants to improve plant diversity at a grassland at Guelph Lake Conservation Area. This activity was part of a two-year grassland enhancement project at Guelph Lake CA and was funded by Forest Ontario's Grassland Stewardship Initiative.
- The Grand River Community Play Project is an inclusive community play aiming to connect people up and down the river with each other and the Grand River. Two story telling events were held in 2022 in Waterloo and Ohsweken.
- The Grand Watershed Trails Network launched a new website (www.grandtrails.ca) to help cyclists, hikers, paddlers and tourists better plan their trips. The maps show river access points and link to local attractions and businesses.

- The City of Kitchener rehabilitated Montgomery Creek, creating a wider, meandering channel with stream flow, erosion, and habitat benefits.

2023

- Digital Doors Open events were held in Elora, Fergus, Guelph, and Waterloo Region.
- The GRCA hosted a workshop in Glen Morris to assist rural landowners with forest management.
- Three days of freshwater mussel sampling were carried out by the GRCA on Grand River tributaries including the Nith River and Fairchild Creek. Two species at risk were identified.
- Conestogo Lake Conservation Area hosted a Kids, Cops Fishing Derby July 22, 2023 – Wellington OPP and MNRF partnered to create a fun educational experience with prizes awarded for catch and release fish.
- Lansdowne Children Centre hosted the annual fundraiser Walk and Roll for supporting children with disabilities at the Brant Conservation Area
- The stocking of fish to support recreational fishing in the Grand and Conestogo Rivers, and other locations, continues to be implemented by the Ontario Ministry of Natural Resources and Forestry with the assistance of the GRCA's staff.
- The GRCA hosted a community tree planting event at Brant Conservation Area in partnership with the City of Brantford and the Brant Tree Coalition. One hectare of the park was naturalized with the help of 400 community members who planted 1100 trees and shrubs.
- An additional 4 hectare of forest was established on GRCA lands near Luther Marsh and Everton. The GRCA thinned 114 hectares of forest conifer plantations on its properties to speed its conversion to more diverse and resilient forests.
- The TH&B Bridge Public Art Project was completed in Brantford. 150 volunteers, including schools, community organizations, small groups, and other talented individuals, participated by submitting and painting unique designs on the bridge's interior panels, contributing to a giant community-developed mural depicting local history, culture, destinations, events, and people.
- Some municipalities are reviewing properties listed on municipal heritage registers that have not yet been designated under the Ontario Heritage Act. Changes to the Act by Bill 23 requires the de-listing of these properties from the Register if not designated by January 1, 2025. Some municipal conservation district studies were paused while municipalities reviewed changing provincial direction.
- The City of Cambridge initiated the Hespeler Heritage Conservation District Study. The study includes the Speed River and Mill Pond.
- The City of Guelph completed the first phase of the Ontario Reformatory Heritage Conservation District Study. The Phase 1 Study provides an assessment of the historical, design and contextual value of the study area, identifies contributing and non-contributing properties and resources, provides a character analysis and statement of cultural heritage value or interest and delineates a boundary for the proposed district.
- The City of Guelph has initiated the first phase of the Downtown Guelph Heritage Conservation District Study and formed a Downtown Guelph Heritage Focus Group.

- The GRCA provided access to its properties to 26 groups for scientific research and monitoring. This includes government agencies, post-secondary institutions, consultants, environmental organizations, and individuals. The topics of the studies are widely varied, from monitoring for black-legged ticks through water quality and climate change studies.
- The GRCA prepared a draft Management Plan for the Niska Land Holdings in 2023. Niska is approximately 65 hectares of forests, wetlands, meadows and agricultural fields and is the convergence of where Hanlon Creek flows into the Speed River.
- The GRCA continues to advance the Bridgeport Dyke Rehabilitation and Capacity Improvement Class Environmental Assessment to explore options to rehabilitate the existing Bridgeport Dyke. The study area includes the Bridgeport Bridge which is designated as a heritage bridge.
- A State of the Watershed Report Card was prepared by the GRCA using internal data along with data from provincial, federal, and local partnerships. A webpage was created to summarize the findings.
- The Six Nations Wildlife and Stewardship Office surveyed community members to learn about priorities, attitudes, and activities related to fisheries and fish consumption in priority water bodies, including the Grand River.
- RTO4 partnered with the Friends of the Grand, Wellington County and the Township of Centre Wellington to have the New Fly Fisher highlight the Brown Trout Fishery success story. The episode launched December 2023⁸.
- The Grand River Community Play Project continued collaborative storytelling about the Grand River through a Quilt Workshop and story circles held in St Jacobs, Cambridge, and Brantford.
- The City of Brantford held Culture Days on the Trails in September, hosting 10 mini performances along a stretch of the Grand River between Hardy Road and Lafayette Avenue. About 600 people attended.
- Children's Water/Groundwater Festivals were held in Wellington County, City of Brantford, and Haldimand County, engaging about 6,500 students from grades 2-5 and about 1,000 volunteers in learning about water, groundwater, aquatic ecosystems and water conservation.
- RTO4, the City of Cambridge, the GRCA and other partners completed improvements to the river access point at the Cambridge to Paris Rail Trailhead in the City of Cambridge.
- Tom Ostapchuk created the short film *The Grand: From source to mouth*, documenting his self supported source to mouth kayak trip down the Grand River. The film was an official selection for the Paddling Film Festival World Tour, the Waterwalker Film Festival, and the Forest City Film Festival. [The Grand - Source to mouth self-supported](#)
- The City of Waterloo completed restoration of a short reach of Colonial Creek at 454 Malabar

2024

- The GRCA developed updated plans and strategies to guide management of the Grand River watershed, including: a Watershed-based Resource Management Strategy, a

⁸ [Grand River Trophy Brown Trout | A Success Story](#)

Conservation Areas Strategy (CAS) , an updated Reservoir Operations Policy, a Water Control Structure Asset Management Plan, and an Ice Management Plan. The CAS identifies maintenance of the Canadian Heritage River designation as an action.

- The City of Waterloo produced a Heritage Designation and Evaluation Report in response to recent changes to the Ontario Heritage Act. The report identifies 40 properties as having potential cultural heritage value or interest under Ontario Regulation 9/06.
- The City of Brantford completed design work and anticipates construction of a new superstructure for Brant's Crossing bridge. The bridge over the Grand River was originally built in 1975 for railway traffic, was converted to a pedestrian and cycling bridge in 1996, and was damaged during an ice jam event in 2018. A municipal class environmental assessment was completed in 2022.
- A group of Regional Tourism Organizations and municipal and other partners held the Grand River Forum, a day-long meeting held by the river in Caledonia to share updates from the RTOs on Grand River-related projects and experience performances from musician Lacey Hill and the Grand River Community Play Project. The Grand River Forum was held in 2019 in Cambridge and 2022 in Brantford.
- The Grand River Water Walk was held September 15-21, 2024. Indigenous-led Grand River Ceremonies were held monthly throughout the year at locations including Schneider Park and Pioneer Tower Natural Area in Kitchener.
- The Ohneganos water research program, with Six Nations of the Grand River, Dr. Mark Servos from the University of Waterloo, and other partners, completed a study of water quality and temperature, and fish and macroinvertebrate communities in McKenzie and Boston creeks. This milestone study revisited sites in the Six Nations territory last sampled in the 1980s.
- Brant County completed an Arts, Culture & Heritage Strategy. A survey in support of the strategy found that 95% of respondents said the Grand River and natural heritage are the most important theme that shapes Brant's identity. The strategies objectives reflect the important of recreational and cultural activities along the Nith and Grand rivers.
- The Grand River Community Play Project continued collaborative storytelling about the Grand River through seasonal themed events held in Guelph at the Hillside Festival, Brantford, Dunnville, Six Nations, and Cambridge.
- The Regional Municipality of Waterloo completed a municipal class environmental assessment for the rehabilitation of the West Montrose Covered Bridge. Known as the "Kissing Bridge", it was originally constructed in 1881. Construction is expected to begin in 2025.
- *Currents of Change: Inspiring Action along the Grand River*, a new exhibit that opened at the Regional Municipality of Waterloo's McDougall Cottage Historic Site in May 2024. Through a blend of history, ecology, and Indigenous and settler narratives, this captivating exhibit examines the profound and dynamic connection between the Grand River, the City of Cambridge's heritage, and our collective future. The exhibit was accompanied by the *Grand Inspirations Art Contest* that invited artists of all media to submit a work that expresses their unique connection to the Grand River. Forty-one entries were received and winning entries were selected by public voting and displayed as part of the Currents of Change exhibit. McDougall Cottage also hosted a "Get to

Know the Grand" Summer Scavenger Hunt and education programming for school aged students.

- River Heritage Festival: This festival held on September 22, 2024, at the GRCA's Brant Conservation Area celebrated the river with exhibits from 17 parties, including the Conservation Authority, local municipalities, First Nations, and non-governmental arts, recreation, environmental, and cultural organizations. A couple of hundred people participated and there were opportunities to bike, hike, and paddle on the river.
- Many other public and private sector events acknowledged the 30th anniversary and included celebration of the River's heritage, including the interactive Voice of the River: The Grand River Community Play Project at the annual Hillside Festival on the Speed River at Guelph Lake Conservation Area, the Bikes and Blues Festival held by Water Cycles in Elora, special promotions by outfitter Grand River Rafting, and a River Talks lecture series held by Grand River Dinner Cruises and Six Nations Tourism.
- The Cambridge Fire Hall Museum & Education Centre and its partners created The Great Flood of '74 - Cambridge's Watershed Moment. The event engaged over 1,000 participants in exhibits, walking tours, local businesses, presentations, videos, and interviews. The community will continue to benefit from the events as pictures, scrap books, oral histories and other materials are collected and donated to local archives for posterity.
- Haldimand County initiated a development of a Lower Grand River Visitor Experience Strategy.
- The City of Brantford held Culture Days on the Trails in September, hosting 10 mini performances along a stretch of the Grand River between Hardy Road and Lafayette Avenue.
- Grand Experiences, a provider of guided interpretive paddling tours of the Grand River is working with Brantford and Six Nations to develop a Great Canadians Tour of the Grand, highlighting famous figures such as artist Lawren Harris and poet Pauline Johnson.
- Grand River Rafting developed a new paddling route for the lower Grand River from York to Cayuga, named Steamboat Alley in recognition of the historical development of locks and canals for steamship passage by the Grand River Navigation Company.
- Water Cycles, an initiative that connects communities with water through cycling, held a Bikes and Blues Festival in Elora/Fergus on August 24, 2024, and volunteer-run bike rides in Waterloo, Elora, Fergus, and Luther Marsh.
- Two Row on the Grand: This event, held annually since 2016, is a 10-day canoe trip on the Grand River where Indigenous and Non-Indigenous participants build mutual respect and understanding of values and culture through the shared experience. The canoe trip is a physical embodiment of the Two Row Wampum, the original peace treaty between Indigenous and settler communities. In 2024 the Two Row experience became a credit course for McMaster university students.
- Six Nations Stewardship held an insectivore bird count along the river and its banks during the summer of 2024 – for the second year in a row.
- Children's Water/Groundwater Festivals were held in Wellington County and City of Brantford, engaging about 6,500 students from grades 2-5 and about 1,000 volunteers in learning about water, groundwater, aquatic ecosystems and water conservation.

- The City of Waterloo completed restoration of a reach of Laurel Creek through Hillside Park.
- The City of Kitchener completed an environmental assessment for stream naturalization near the confluence of Schneider and Shoemaker Creeks.
- Through the GRCA's conservation services program, 270 projects were implemented by rural landowners to improve water quality and watershed health, supported by cost-share grants from municipalities and federal funding. Additionally, over 140,000 trees were planted through the GRCA's private land tree planting program and community tree planting events.

Appendix C: Workshop Participants

Arash Ghomlaghi, University of Waterloo
Chinonso Chris-Emenyonu, University of Waterloo

Rayden Laliberte, University of Waterloo

Bryan Tolson, University of Waterloo

Lauren McElroy, University of Waterloo

Jane Mah Hutton, University of Waterloo

Will Rauch-Davis, University of Waterloo

Scarlett van Berkel, University of Waterloo

Carissa MacKenzie, University of Waterloo

Andrii Kramarenko, University of Waterloo

Amy Lacey, University of Waterloo

Madeline Tucker, University of Waterloo

Thomas Odland, University of Waterloo

Alexa Holder, University of Waterloo

Diana Pena, University of Waterloo

Noelle Starling, University of Waterloo

Camila Granito, University of Waterloo

Bruce MacVicar, University of Waterloo

Leo Wu, University of Waterloo

Joseph Wortman, University of Waterloo

Vani Goel, University of Waterloo

Leah Jones-Crank, University of Waterloo

Favour Ozordi, University of Waterloo

Jordana Polera, University of Waterloo

Dustin Garrick, University of Waterloo, CWP
Director

Daylon Gee, Six Nations of the Grand River

Lauren Vanderlingen, Six Nations of the
Grand River Elected Council

Steve Shikaze, Hydrogeologist

Anne Crowe, Grand Watershed Trails
Network

Dan Mckay, Grand Watershed Trails
Network

Ellie Joseph, Two Row on the Grand

Jay Bailey, Two Row on the Grand

Lisa Rafferty, Brant Waterways Foundation

Barb Veale, Conservation Halton

Patricia Gillis, Environment and Climate
Change Canada

Jack Imhoff, Trout Unlimited

Tony Zammit, Grand River Conservation
Authority

Mark Anderson, Grand River Conservation
Authority

Janet Ivey, Grand River Conservation
Authority

Anthony Kelly, Grand Valley Trails
Association

Allan Bennett, Grand Valley Trails
Association

Ray Martin, Fire Hall Museum & Education
Centre

Peter Smith, Canadian Centre for Rural
Creativity

Tristin Vogel, Regional Tourism
Organization 4

Appendix D: Changes and Threats to Natural, Cultural and Recreational Values

Natural Heritage Values

Hydrology

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Drainage Basins	The Grand River Basin is nested within and represents 10% of the Lake Erie Basin.	None			
Seasonal Variation	Flood flows in the main Grand River are influenced mostly by the Shand and Conestogo dams and to a lesser extent the Guelph Dam. The Nith, Whiteman's and Mackenzie Creek flows are not regulated and experience a large range of flows.	Analysis of historical climate and stream flow show a trend towards warmer winters with more frequent snowmelt events, and smaller spring freshets.	<p>Flows in the Grand River continue to be subject to seasonal variation and the frequency and magnitude of flood and low water events may be influenced by climate change.</p> <p>During the past decade, the Grand River experienced a few notable flood events, including a March 2021 snowmelt event, a February 2018 ice jam event, and high rainfall events in June 2017, January 2020, and September 2021.</p> <p>At the other extreme, Level 1 low water conditions (under the Ontario Low Water Response program) were declared for at least part of the watershed in 8 of the last 11 years. Level 2 conditions were declared for at least part of the watershed in 2015, 2016, 2020, and 2022.</p>	<p>The GRCA's major reservoirs are used to reduce downstream flooding.</p> <p>In 2024, the GRCA updated the Reservoir Operations Policy and completed an Ice Management Plan.</p> <p>A flood damage study was completed for New Hamburg (2020) and studies are underway for Grand Valley, Waldemar, Drayton, and Bridgeport.</p> <p>Level 1 low water conditions result in a request for a voluntary 10 per cent reduction in water consumption by all water users, including municipalities, aggregate operations, golf courses, water bottlers, farms for irrigation and private users. Level 2 results in a request for a voluntary 20 per cent reduction in water consumption by all water users.</p>	Yes
Water Content	In general, total suspended solids (TSS) appear to be low throughout the upper and middle Grand River reaches when compared to the lower Grand River. The significant increase in suspended solids concentrations is seen between Glen Morris and Newport Bridge below Brantford is likely due to the southern clay plain within which the river begins to flow. Another potential source of TSS to the Grand River is the Nith, given its higher concentrations than the Grand River at Glen Morris and its identification as the second highest TSS load when compared to all other major tributaries. Source: GRCA, 2006. ⁹	None			

⁹ Cooke. S. 2006. Water quality in the Grand River: a summary of current conditions (2000-2004) and long term trends. Grand River Conservation Authority.

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
River Size	The Grand River is approximately 290 km long and with its 4 major tributaries, the Nith, Conestogo, Eramosa and Speed it totals 627 km.	None			

Physiography

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Physiographic Regions	The Grand River is located within the St Lawrence Lowlands physiographic region. Three distinct areas – Dundalk and Stratford Till Plains in the north and west, the Horseshoe Moraines in the central and east parts of the watershed and the Haldimand Clay Plain in the south.	None			
Geological Processes	Bedrock formations generally outcrop or subcrop in long parallel bands of varying width, aligned in a north-west to southeast direction. The bedrock subcropping within the watershed consists of Ordovician to Devonian-aged sedimentary rocks, deposited in a marine environment that existed in the area between 345 to 370 million years ago. In total, there are 11 different bedrock formations outcropping or subcropping within the Grand River watershed, all of which were initially deposited horizontally. Regionally, they now dip approximately 2 degrees to the west as a result of subsequent structural deformation (Lake Erie Source Protection Region Technical Team, 2008).	None			
Hydrogeology	Varied hydrologic conditions exist throughout the watershed. The northern portion of the watershed is largely comprised of till plain characterized by high surface runoff and very little ground infiltration. The central portion contains most of the watershed’s moraines and sand/gravel deposits left by glaciation. Due of the significant amount of pervious material and the lack of a well-defined drainage network, this area is characterized by extremely high infiltration and relatively low surface runoff. The southern portion of the watershed is dominated by the Haldimand Clay Plain which produces very high surface runoff with little to no infiltration.	Reduced infiltration of precipitation and groundwater recharge in localized areas.	Expansion of impermeable surfaces through urbanization (e.g., more extensive paved areas).	Some municipal water supply aquifers have been identified as vulnerable to groundwater recharge reduction and overconsumption, including wells providing supply to the Region of Waterloo, City of Guelph, Township of Centre Wellington, Township of Guelph/Eramosa, and Brant County. Policies to protect groundwater recharge for vulnerable municipal water supply sources are being developed and implemented under the Grand River Source Protection Plan. Some municipalities encourage infiltration of stormwater (where appropriate) through implementation of stormwater management master plans and policies.	Yes
Topography	Surface elevation in the watershed ranges from 173 metres above sea level at the mouth of the Grand River on Lake Erie, to 535 metres above sea level in the northern headwaters.	None			

River Morphology

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Valley Types	Typical of most river valleys, the Grand River is V-shaped.	None			
Channel Types	<p>The river exhibits a dendritic pattern. It is meandering and wide in some areas and straighter with steep slopes in others. The central part of the river exhibits more meandering than the areas to the south towards its mouth.</p> <p>Historically, watercourses were commonly straightened, hardened or buried in urban areas and straightened, dredged or removed in rural areas for farming.</p>	Over the last decade, there has been some limited restoration of watercourses using natural channel design and improvement of riparian plantings in rural areas.	<p>City of Kitchener is implementing the recommendations of its Integrated Stormwater Management Master Plan (2016), including naturalization and restoration of some urban tributaries to the central Grand River.</p> <p>Stewardship programs such as the GRCA's Rural Water Quality Program offer financial assistance to landowners to restore and protect watercourses through riparian plantings and the establishment of best management practices.</p>		Yes, restoration and naturalization work is ongoing.
Channel Profile	Confined and unconfined slopes are exhibited on the river and its tributaries. Steep slopes can be seen in areas such as the Elora Gorge and flatter areas towards the mouth of the river. Levees and dams are located along the river at multiple locations.	None			
Fluvial Landforms	The river and its tributaries display a variety of fluvial landforms such as waterfalls, gullies, levees, floodplains, pools, riffles, point bars, islands and ox-bow lakes.	None			

Biotic Environments

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Aquatic Ecosystems	Cold water tributaries are typically situated within areas underlain by appropriate surficial geology (sand and gravelly substrates) and are fed by large amounts of groundwater. These tributaries support cold water species such as brook trout, brown trout, rainbow trout, and mottled sculpin. Warm water tributaries situated on clayey to silty/clayey till plains and low moraines provide very low baseflows. Flows along these reaches can be permanent, intermittent, or ephemeral. Fish communities tend to be dominated by a mix of warm water fish species.	<p>Aquatic ecosystems continue to be impacted by intensive agricultural practices, urban drainage, and spread of invasive species (e.g., Round goby, Asian carp, Sea lamprey, Rusty crayfish, Zebra mussels). Climate change may pose an added threat by impacting the hydrologic cycle and stream temperatures, affecting habitat for aquatic life.</p> <p>Over the last decade, there has been some limited restoration of aquatic ecosystems in rural and urban areas.</p>	<p>Many stewards work to restore and enhance aquatic ecosystems in the Grand River watershed, including municipalities, private landowners, the GRCA, and non-governmental organizations, such as Trout Unlimited. For example:</p> <ul style="list-style-type: none">The City of Kitchener has rehabilitated or naturalized about 4.3 km of creeks over the past decade. Projects included removing concrete-lined channels, widening and naturalizing watercourses, and improving aquatic habitat. These projects produce a range of benefits from healthier ecosystems to more climate resilient urban communities.The City of Waterloo has completed an average of 1 creek rehabilitation/restoration project every		<p>Yes, aquatic ecosystems continue to be impacted by urban and rural land use practices, invasive species and climate change.</p> <p>Restoration work is ongoing.</p> <p>Over the last half of the decade, active implementation of the Grand River Fisheries Management Plan has slowed, in part due to changes to the GRCA's coordinating role as a result of amendments to the Conservation Authorities Act. While restoration work continues, the interagency coordinating mechanism is not as strong.</p>

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
			<p>year over the past decade. These projects have included bank stabilization measures, reconfiguration where required, restoration and rehabilitation of corridor features such as wildlife sanctuary, wetland protection and public active transportation routes. The City continues to prioritize creek work through its environmental studies and updates to the Stormwater Management Master Plan.</p> <ul style="list-style-type: none"> The Mill Creek Stewardship Rangers Program rehabilitated > 1 km of Mill Creek and removed beaver dams to improve fish passage (Cambridge). In 2023 & 2024 the GRCA, with support from Fisheries and Oceans Canada (DFO), surveyed twenty unclassified municipal drains, assessing flow conditions and fish and benthic macroinvertebrate communities. <p>Options for future improvements to aquatic ecosystem of the southern Grand River were considered through the work of the multi-agency Southern Grand River Ecosystem Rehabilitation Working Group, co-led by the Ministry of Natural Resources and Environment and Climate Change Canada. This work culminated in workshops and a synthesis report that proposed a path for ecosystem rehabilitation in the lower reaches of the river.</p>		Limited fish community information is available at the watershed scale to inform aquatic ecosystem management. The GRCA undertakes some fish community monitoring to support subwatershed planning in tributaries of the urbanizing central watershed.
Terrestrial Ecosystems	<p>The Grand River watershed spans two major ecoregions in Ontario, namely the Great Lake- St. Lawrence Forest Zone in the north and the Carolinian Forest Zone in the south. The Carolinian Forest exhibits unique characteristics not seen in other areas of Canada. It comprises only 1% of the country's total area, but it contains more plant and animal species than any other ecosystem in Canada (Carolinian Canada, 1994). Approximately 19% of the watershed is forested, 10% is covered in wetland, and 0.01% is remnant tallgrass prairie habitat.</p>	<p>Terrestrial ecosystems continue to be impacted by intensive agricultural practices, urbanization, and spread of invasive species (e.g., Purple loosestrife, Giant hogweed, buckthorns, garlic mustard, emerald ash borer). Climate change may pose an added threat by impacting the hydrologic cycle and air temperatures, affecting habitat for terrestrial life.</p> <p>Emerald ash borer (EAB) has had significant impacts on tree cover and forest diversity over the past decade. Most areas of the watershed have now lost most ash trees over 20 cm in diameter. This has especially impacted young and previously disturbed forests</p>	<p>Many stewards work to restore and enhance terrestrial ecosystems in the Grand River watershed, including municipalities, private landowners, the GRCA, and non-governmental organizations, such as Ducks Unlimited Canada (DUC).</p> <p>DUC has a long history of restoring and conserving wetlands within the Grand River watershed, with most of these projects being delivered through DUC's small wetland restoration and large wetland rebuild programs in partnership with private landowners. Since 2014 DUC has restored a total 710 acres of wetland habitat, through 115 individual projects. In addition, DUC has secured 1910 acres of existing uplands and 960 acres of existing wetlands through the use of private conservation agreements to ensure that these crucial habitats remain on the landscape.</p>		<p>Yes, terrestrial ecosystems continue to be impacted by the spread of invasive species, intensive agricultural practices, and urbanization. The impacts of climate change are a growing concern.</p> <p>Over the last decade there have been changes to the roles, responsibilities and processes for consideration of natural heritage matters in land use planning decisions. In 2022, the Ontario Ministry of Natural Resources and Forestry updated the Ontario Wetland Evaluation System. Concerns have been raised that changes to the process for wetland evaluations and complexing may reduce protections for some wetlands from future development. Replacement of the Growth Plan for the</p>

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
		<p>where ash was often the predominant tree species. It also especially impacted hedge rows and the urban forest. Significant changes to overall forest composition have been caused by EAB.</p> <p>Over the last decade, there has been some limited restoration of terrestrial ecosystems in rural and urban areas.</p>	<p>Since 2014 the GRCA has facilitated planting of 983,000 trees on private land. These tree planting projects include retirement of 560 ha of marginal agricultural lands, establishment of 188 km of windbreaks and 72 km of watercourse buffer. The GRCA worked with private landowners to establish an additional 20 ha of wetland and 10 ha of grassland habitat.</p> <p>Over the ten-year period GRCA completed the following restoration work on GRCA-owned lands: 132 ha of afforestation, 660 ha of plantation management and restoration, 3 small newly created wetlands (0.4 ha), 380 ha of maintaining and enhancing created grasslands, and 85 ha of maintaining and enhancing created wetlands.</p>		<p>Greater Golden Horseshoe with an updated Provincial Planning Statement (2024) further changed natural heritage policies.</p> <p>Some municipalities have updated Natural Heritage System mapping and policies as part of comprehensive review and update of Official Plans.</p>

Vegetation

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Significant plant communities	Rare cliff, talus, crevice and cave communities are associated with the Eramosa River Valley, which has been designated a provincially significant Life Science Area of Natural and Scientific Interest by the Ontario Ministry of Natural Resources (OMNR). Globally and provincially rare Dry Tallgrass Prairie and Dry Black Oak Tallgrass Savannah communities occur as scattered remnants throughout the County of Brant, Township of North Dumfries, the City of Cambridge and Oxford County.	<p>Significant plant communities continue to be impacted by intensive agricultural practices, urbanization, and spread of invasive species.</p> <p>Over the last decade, there has been some limited restoration of significant plant communities.</p>		A suite of grassland communities, including Dry Tallgrass prairie, is being maintained on select GRCA properties throughout the watershed (Luther Marsh, Damascus, Morton, Birkett Lane, Dunnville properties).	<p>Land development along the north shore of Lake Erie continues to be a threat to globally and provincially significant coastal wetland communities.</p> <p>Agricultural practices, land development, and below water extraction continue to pose a potential threat to wetlands throughout the watershed. Fens, bogs, and organic swamps are particularly sensitive to hydrologic alterations caused by below water extraction.</p> <p>Natural succession and land development continue to threaten rare tallgrass prairie communities within the central portions of the watershed.</p>
Rare Plant Species	At least 64 plant species recorded in the watershed are ranked as provincially rare (S1- S3) by the Natural Heritage Information Centre (NHIC). Of these, 19 species are listed as species at risk (Special Concern, Threatened, or Endangered) in Ontario.	Of the 32 rare plant species that historically occurred on or near GRCA land, 14 species have been confirmed as still present. Eleven species are legally protected under Ontario's Endangered Species Act.		<p>Phragmites control efforts on a GRCA property that is host to Virginia mallow, a provincially and nationally endangered species, have contributed to a more than doubling of the area covered by Virginia mallow.</p> <p>GRCA staff have been documenting healthy butternut trees on GRCA owned lands,</p>	<p>Climate change, invasive or nuisance species (i.e., white tailed deer), illegal collection and other unregulated activities (i.e., all terrain vehicles, agricultural activities) are considered the greatest threats to rare plant species.</p> <p>Natural disease or exotic pests continue to threaten species such as American chestnut,</p>

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
				including genetic testing of some of the trees to check for purity (pure and hybrid trees are mapped as both could provide important genetic material for future restoration efforts).	black ash, butternut, eastern flowering dogwood, and eastern hemlock. Species listed as provincially threatened or endangered are legally protected under Ontario's Endangered Species Act. Some municipalities also afford protection to rare plant species through their Official Plan policies.

Fauna

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Significant Animal Populations	Thirty nine herpetofauna species (20 amphibians and 19 reptiles) have been recorded within the watershed. As many as 292 breeding and non-breeding birds have been confirmed and 44 mammals have been documented historically. Bald Eagle breeding has been confirmed at as many as 8 sites between Luther Marsh and Dunnville Marsh. Luther Marsh remains one of the most significant sites for wildlife. Species known to breed at Luther Marsh include Bald Eagle, Osprey, Least Bittern, Black Tern, Virginia Rail, Black-crowned Nightheron and Great Blue Heron. Significant numbers of waterfowl (i.e. Mallard, Wood Duck, Blue- and Green-winged Teal, American Widgeon, and Gadwall) occupy the marsh areas during the spring and fall migration. Many waterfowl and colonial waterbirds, including Great Blue Heron, Blackcrowned Night-heron and Green Heron breed at Luther. As many as 400 Great Egret have been known to occupy fall roost at Luther Marsh. River Otter, a species once thought to be extirpated in southern Ontario was recently rediscovered at Luther Marsh and near the confluence of the Grand River and Speed Rivers in Cambridge.	<p>Bald eagle and osprey populations remain stable and have likely increased as a result of improved water quality and related conservation efforts across the watershed.</p> <p>Brook trout populations appear to have remained stable within key cold-water tributaries. Non-native brown trout and migratory rainbow trout populations also remain stable within the watershed.</p> <p>The total number of hunters and ducks harvested at Luther Marsh Wildlife Management Area continued to decline between 2014 and 2024. Hunter success rates continued to fluctuate and peaked in 2016 and 2023, with an overall slight downward trend between 2014 and 2024. This suggests that migratory waterfowl populations at Luther Marsh are relatively stable but possibly declining.</p>	Ongoing monitoring of animal populations by many parties	Bird populations in the watershed continue to be monitored and assessed as part of the third Ontario Breeding Bird Atlas project (2021-2025), which is being led by the Canadian Wildlife Service, Ontario Ministry of Natural Resources and Forestry, and Birds Canada.	<p>The installation of wind turbines may be a threat to birds and bats. Further studies is needed.</p> <p>Hydrologic alterations due to climate change and the spread of invasive species such as Phragmites australis pose a threat to wetland dependent species, including fish, mussels, waterfowl, and waterbirds such as great blue heron and great egret.</p>
Rare Animal Species	At least 54 animal species recorded in the watershed are ranked as provincially rare (S1- S3) by the NHIC including 33 breeding birds, 4 amphibians, 11 reptiles and 6	Recent research by the GRCA indicates that there are over 270 rare animal species within the watershed, including 96 species at risk that are legally protected under	Ongoing monitoring of	Increased monitoring efforts by the GRCA and others have led to a better understanding of the abundance and distribution of aquatic and	Unregulated agricultural activities, land development, invasive species (e.g. Phragmites australis, purple loosestrife, flowering rush), and

Category	Natural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
	<p>mammals. Of these, 41 species are listed by the OMNR as species at risk (Special Concern, Threatened, or Endangered) in Ontario. Twelve invertebrates are ranked as provincially rare and Monarch is listed as a species of special concern provincially and federally. Ten species within the Grand River and its tributaries are currently listed as species at risk by the OMNR.</p>	<p>Ontario's Endangered Species Act: 43 birds, 14 fishes, 12 mollusks, 11 reptiles, 6 insects, and 3 amphibians.</p> <p>Of the 31 species that historically occurred on or near GRCA land, all but 3 species (spiny softshell turtle, spotted turtle, and gray ratsnake) are confirmed to be present.</p> <p>Sections of the Grand River and its tributaries continue to support variety of provincially and federally protected aquatic species at risk, especially fishes and mussels, in spite of high sediment and nutrient levels.</p> <p>Recent monitoring efforts suggest that red-side dace (endangered) may now be extirpated within Irvine Creek, a tributary of the Grand River.</p> <p>Wavy-rayed lampmussel (special concern) was confirmed for the first time in a middle section of the Speed River.</p>	<p>rare animal species</p>	<p>terrestrial species at risk within the Grand River watershed.</p> <ul style="list-style-type: none">GRCA partnered with Department of Fisheries and Oceans to carry out freshwater mussel sampling within localized reaches of the Speed River, Fairchild Creek, Whiteman's Creek, and the Grand River, completed in 2022 and 2023. Additional monitoring and assessment were completed by the University of Windsor and others.GRCA monitored grassland birds on GRCA land to assess the efficacy of habitat restoration & conservation efforts, with a focus on rare birds such as bobolink (threatened), eastern meadow (threatened), and grasshopper sparrow (special concern). <p>Signage informing the public about reddsides dace, a Species of Risk, was installed at locations along Irvine Creek, a tributary of the Grand River.</p> <p>The GRCA collaborated with Nature Canada and provided technical advice to help support the nomination of 2 Key Biodiversity Areas within the watershed. The Grand River Marsh Complex was determined to be critical for the protection of aerial insectivores such as barn swallow (downlisted to special concern) and bank swallow (threatened). The Nith River between Ayr and Paris was deemed to be critical for the protection of rapids clubtail (threatened) and other aquatic or semi-aquatic species at risk.</p> <p>A national recovery strategy for reddsides dace was developed by DFO in 2024.</p> <p>A report on the progress of recovery strategy implementation for round pigtoe was issued by DFO in 2024.</p> <p>DFO issued a management plan for mapleleaf and rainbow mussel in 2023.</p> <p>MECP issued recovery strategies for 3 protected mussels in 2023.</p>	<p>climate change continue to threaten rare animal species, including aquatic and terrestrial species at risk.</p> <p>Poor water quality within the lower Grand River and physical barriers (i.e., dams) are considered limiting factors for rare fishes and molluscs.</p>

Cultural Heritage Values

Resource Harvesting

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Fishing	The river was used for historic Aboriginal, domestic and commercial fishing and processing. The river continues to be a major fisheries attraction.	None			
Shoreline Resource Harvesting	Trapping of fur-bearing animals, collection of aquatic plants, hunting of birds and land animals, mines and quarries in river valleys.	None			
Extraction of Water	There are 4 surface water intakes for drinking water (Region of Waterloo, City of Guelph, City of Brantford and Six Nations). The river also provides private supply for agriculture and industry.	Municipalities continue to assess the need for new water supply sources to meet demand and in response to trends in water quality in existing sources. This may change the traditional proportions of river vs groundwater reliance in the watershed.	Growing populations requiring additional water supplies. Elevated nitrates and chlorides in some municipal drinking water sources.	The GRCA continues to deliver the drinking water source protection program under the Clean Water Act to protect municipal water sources from contamination or overuse. The GRCA continues to conduct reviews of Aggregate Resource Act applications to identify where dewatering of aggregate sites could impact the quality or quantity of vulnerable municipal drinking water sources (groundwater or surface water).	Yes

Water Transport

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Commercial Transportation	The river is mainly used for pleasure craft today, but historically was used for prehistoric trade and to move commercial freight.	None			
Transportation Services	In the past, the river contained fur trade posts, navigational improvements (i.e. Grand River Navigational Co.), shipyards and facilities for loading/provisioning passengers.	None			
Exploration & Surveying	The river was used for French and British exploration, migration and settlement and surveying expeditions (i.e. Augustus Jones).	None			

Riparian Settlement

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Siting of Dwellings	Shoreline seasonal dwellings (i.e. Paleo- Indian sites in the southern watershed), riverside homesteads and farms (i.e. Doon Heritage Crossroads), permanent riverside dwellings (i.e. Tisdale House), dispersed dwellings in settlement patterns (i.e. Hiram “King” Capron).	Additional discoveries of archaeological and spiritual value.	<p>Development and construction projects continue to prompt discovery of archaeological finds. For example, since 2018, over 50,000 Indigenous artifacts have been excavated from a Kitchener site, including carbonized seeds, pottery, spearheads, and evidence of a longhouse and village. The finds date from the Late Archaic and Late Woodland time periods. The site is near Strasburg Creek, a tributary of the Grand River.</p> <p>An archaeological dig in Brantford that wrapped up in 2016 excavated nearly 400,000 items over a few years. The artifacts included an Upper Canada coin dating to the 1820s, relics from early European settlers, and Indigenous materials dating to 500BC.</p>		
River-based Communities	Permanent shoreline Aboriginal communities (i.e. Middleport Site National Historic Site) and river industry-based communities (i.e. the Goldie Family and the Village of Greenfield).	<p>Adaptive re-use of historic buildings in river-based communities is ongoing (e.g., Gaslight District in Cambridge).</p> <p>Review and potential designation of heritage structures in river-based communities is underway.</p> <p>Greater awareness of First Nations land rights and treaties.</p>	<p>There is an increased awareness of the roll that the river played in the establishment of communities and an interest in preserving and adapting the buildings for re-use.</p> <p>Changes to the Ontario Heritage Act in 2022 affected procedures and criteria for listing properties on municipal registers, designating properties under the Ontario Heritage Act, and establishing Heritage Conservation Districts. These changes have the potential to increase the risk of demolition or loss of built heritage in river-based communities.</p>	Municipalities continue to review and update municipal registers under the Ontario Heritage Act.	Yes
River-influenced Transportation	Ferries and fords (i.e. Six Nation of the Grand River Ferry Crossing), road bridges (i.e. West Montrose Covered Bridge), rail bridges (i.e. CPR Speed River Bridge)	None			

Culture & Recreation

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Spiritual Associations	Sacred or spiritual sites, ritual or ceremonial structures and sites (Detweiler’s Meetinghouse, aboriginal burial places - many of which are found throughout the watershed), European burial places (i.e. John Galt Memorial).	Growing appreciation of First Nations’ ways of knowing and stewarding the river.	Greater awareness of First Nations rights and history because of global and local movements towards truth and reconciliation.	<p>Many events and activities are helping to foster greater awareness and appreciation for First Nations’ ways of knowing and stewarding the river and furthering reconciliation of Indigenous and non-Indigenous peoples.</p> <p>Two Row on the Grand, held annually since 2016, is a 10-day canoe trip on the Grand River where Indigenous and Non-Indigenous participants build mutual respect and understanding of values and culture through the shared experience. The canoe trip is a physical embodiment of the Two Row Wampum, the original peace treaty between Indigenous and settler communities. An article published in the Canadian Journal of Native Education in 2019 illustrated the experiences of an Indigenous participant and a non-Indigenous participant in the event .</p> <p>Indigenous-led Water Walks have become annual events in the watershed. Inspired by Anishnaabe Elder Josephine-Baa Mandamin, people from all nations join in a week-long ceremonial walk honoring the Nibi (water) from the river’s mouth to the headwaters.</p> <p>Ohneganos is an Indigenous water research program led by McMaster University’s Dr. Dawn Martin Hill. An interdisciplinary team of academics, local experts and project partners is creating new ways to integrate Indigenous Knowledge and Western Science. Among other initiatives, Ohneganos and its partners held a Traditional Ecological Knowledge Summit on March 6, 2024, at Six Nations of the Grand River. Through digital oral storytelling, a youth-led video podcast, and other projects, the group is helping to share Traditional Ecological Knowledge.</p>	Yes, collaborations among Indigenous and non-Indigenous interest holders continue.

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Cultural Expression	Meetinghouse, aboriginal burial places - many of which are found throughout the watershed), European burial places (i.e. John Galt Memorial).	Development of new artistic expressions celebrating the cultural heritage of the Grand River.	Growing interest in exploring the cultural heritage of the Grand River to engage watershed residents in stewarding the river and developing a sense of place.	<p>Many individuals and organizations are creating artistic works that celebrate the history of the Grand River.</p> <p>For example, the Grand River Histories Project, lead by Regional Tourism Organization #4, recognizes that telling the story of the Grand River is as important for fostering connection with the river as creating recreational infrastructure. Storytellers, artists, and creatives came together to share experiences, resulting in the creation of a program to fund experience development. Funding supported Tom Ostapchuk's short film The Grand: From source to mouth, documenting his self supported kayak trip down the Grand River. The film was an official selection for the Paddling Film Festival World Tour, the Waterwalker Film Festival, and the Forest City Film Festival.</p> <p>The Grand River Community Play Project: The Voice of the River, led by playwright Peter Smith, held interactive performances throughout the watershed, serving as "prologues" for a planned event running the length of the river in 2025. Held in partnership with RTO #4 and members of Six Nations of the Grand River, the project uses performance and storytelling to reconnect people with the river and a sense of place.</p>	Yes, this work continues.
Early Recreation	Recreational boating, angling, land-based touring, organized river recreation facilities/clubs.	There has been an increase in recreational boating opportunities in the watershed.	Growing interest in adventure-based tourism and support from Regional Tourism Organizations to develop new destination experiences.	Opportunities to paddle the Grand River are expanding. Six Nations Tourism offers guided tours that share information about First Nations beliefs, centred on the Haudenosaunee Thanksgiving Address. Grand River Rafting developed a new paddling route for the lower Grand River from York to Cayuga, named Steamboat Alley in recognition of the historical development of locks and canals for steamship passage by the Grand River Navigation Company. Grand River Experiences developed a Nith River guided canoe trip.	Yes

Jurisdictional Uses

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Conflict & Military Associations	Aboriginal internecine conflict, aboriginal- European conflict, European internecine conflict (i.e. Port Maitland), military expeditions (i.e. Elora Drill Shed/The Armory).	None		The Heritage Working Group held a workshop in 2015 that included a half day program on The Great War Remembered.	
Boundaries	International borders, interprovincial and inter-territorial boundaries, land use/cultural boundaries, transboundary rivers.	None			

Category	Cultural Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Environmental Regulation	Flood control, water management, aquatic ecosystem management and regulation of river access have been issues historically. The Conservation Authorities Act was passed in 1946 by the Ontario government in response to severe flooding and erosion problems in the province. In 1948, the Grand River Conservation Authority was formed to deal with the issues noted above. GRCA regulates development in hazard lands, including the floodplain, through a regulation under the Conservation Authorities Act.	Environmental regulations continue to evolve over time.	Legislative change.	The Conservation Authorities Act has been amended a few times over the last decade with more substantive changes in 2020-2024. As a result, all conservation authorities deliver mandatory programs and services related to the risk of natural hazards, including floodplain regulation and flood forecasting and warning. The GRCA regulates development in hazard areas (floodplains, wetlands, etc.) under Ontario Regulation 41/24 (Prohibited activities, exemptions and permits). The GRCA no longer comments on matters of natural heritage on land use planning related matters. Commenting on natural heritage remains the responsibility of municipalities. Other changes in the provincial policy framework for management of natural heritage is described above under the “terrestrial ecosystem” value.	

Recreational Heritage Values

River Touring

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
River Access Points for River Touring	The Grand has over 30 organized paddling access points in the river system.	Improvements in recreational river access points.	<p>Grand River Access Point Improvement Project: RTOs working with the GRCA, municipalities, and many other partners are assessing river usage and awareness and improving river access points. The project began with development of an Access Point Standards Manual and Signage and Style Guide. The new standards were piloted at Wilson’s Flats in the Township of Centre Wellington and projects followed at Idlewood Creek in the City of Kitchener, West Montrose in the Township of Woolwich, the Cambridge to Paris Rail Trailhead in the City of Cambridge, and Otterbein Road in the City of Kitchener. Improvements have included parking, washrooms, canoe racks, picnic tables and benches, information kiosks and maps, garbage bins, and improved signage (e.g., river mile markers).</p> <p>Upgrades to various boat launches and docks across many GRCA conservation areas. In 2023, the boat launch area at Rockwood Conservation Area was upgraded, featuring a new assisted canoe and kayak launch as well as shoreline improvements to help prevent further erosion. Docks and canoe launches were installed in new locations at Luther Marsh Wildlife Management Area and annual launch opening timelines were expanded. Brant Conservation Area improved two boat launches and has expanded the adjacent area to accommodate more space, parking, bus access and washrooms. Byng Island Conservation Area maintained access to their Lake Erie boat launch while addressing issues with Ash tree die-off, due to Emerald Ash Borer, along the shoreline. They also operate a boat rental program with direct access to the Grand River. In 2021, Shade’s Mills Conservation Area introduced a boat concessionaire that provides canoe, kayak and stand-up paddle board rentals, leading to increased capacity to offer water-based recreation services.</p>		Work is ongoing.
Portages	The river has marked dam portages.	None			
Paddling, Kayaking, Rowing and Rafting	Paddling, rowing and rafting occur on many stretches of the Grand and its tributaries. Whitewater kayaking occurs in the spring in the Elora Gorge. Stand up paddleboarding is also starting to become popular.	Expansion of opportunities for guided paddling experiences.	Opportunities to paddle the Grand River are expanding. Six Nations Tourism offers guided tours that share information about First Nations beliefs, centred on the Haudenosaunee Thanksgiving Address. Grand River Rafting developed a new paddling route for the lower Grand River from York to Cayuga, named Steamboat Alley in recognition of the historical development of locks and canals for steamship passage by the Grand River Navigation Company. Grand River Experiences developed a Nith River guided canoe trip.		
Motorized Pleasure Boating	Motorized boating occurs on some of the reservoirs and in the lower part of the river.	Concerns raised by some non-motorized paddlers about the impact of fast-moving motorized watercraft on shoreline erosion and paddler safety.			

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Sail Boating	Sailing takes place on the major reservoirs (i.e. Belwood Lake Conservation Area) and in the lower Grand.	None			
Tour Boats	Private day boat excursions occur below Brantford (i.e. Grand River Dinner Cruises).	None			

Water Contact/Content

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Swimming	In designated beaches at GRCA parks.	Introduction of capacity limits at some GRCA conservation areas with beaches.	To manage growing demand for outdoor and water-based recreation and balance use with conservation of the environmental features.	The GRCA manages capacity limits at Conservation Areas to balance use of facilities and environmental impacts on day use areas. The GRCA provides real-time park status capacity updates on its website. An online reservation system was introduced in 2021 to manage visitation at the Elora Quarry, a popular swimming location.	Demand remains high for access to some swimming locations.
Water Skiing	In reservoirs and lower Grand.	None			
River Tubing	Tubing is popular at the Elora Gorge.	None			

Angling

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Access Points for Angling	There are many organized access points for anglers, particularly for fly fishing in the Fergus/Elora area.	None			
Fish Passageways	Fish ladders are incorporated into some of the dams. Byng Island Conservation Area is home to one of the country's biggest fish ladders, which allows lake fish to migrate past the Dunnville Dam to prime spawning and nursery habitats in the river.	The fishway at the Dunnville Dam is providing limited passage.	Poor location.	The GRCA commissioned an assessment of the Dunnville fishway in 2020. While the state of repair of the fishway could be improved, due to its location, it is unlikely to attract a substantive portion of the migrating walleye population even if improved.	
Fly Fishing	Several key stretches are well-known for fly fishing (brown trout).	None			
Ice Fishing	GRCA parks offer ice fishing on reservoirs once ice has formed and is safe (i.e. Shades Mill Conservation Area).	Warmer than typical temperatures during the 2022-2023 and 2023-2024 winter seasons resulted in cancellation of ice fishing on GRCA-owned reservoirs.	Mild winter conditions. If climate change results in more frequent warmer winters, these impacts could become prevalent	When conditions are not favourable for ice fishing, GRCA cancels the program.	Yes

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Other Recreational Fishing	We have several stretches of the river system that are fished for warm and cold water species. The river is renowned for its brown trout, trophy bass and pike fishing. Fishing is done on the shore, by wading and also in boats (i.e. canoes, drift boats).	<p>Some concern regarding consumption limits for fish caught in some reaches of the Grand River and its tributaries.</p> <p>Ongoing assessment and stocking of sport fisheries, including brown trout and walleye.</p>	Community perceptions and values.	<p>In 2023 the Six Nations Wildlife and Stewardship Office surveyed community members to learn about priorities, attitudes, and activities related to fisheries and fish consumption in priority water bodies, including the Grand River. The study confirmed the continued close interconnected relationship between the Grand River and the Six Nations community. While the Grand River remains a popular fishing location for the community, the survey revealed concerns about pollution of the river.</p> <p>The Province of Ontario is responsible for providing fish consumption advice based on the level of contaminants found in fish according to their location, species and length.</p> <p>The Ontario Ministry of Natural Resources and partners continue with annual stocking of brown trout in the Grand River (about 25,000 per year) and the Conestogo River tailwater (about 20,000 per year). Brown trout stocking also occurs in local ponds including in Mill Creek – Cambridge, Marden Community Centre Ponds, Watson Pond – North Dumfries (Ayr), and Rockwood Conservation Area.</p> <p>Over the past decade, the Ministry of Natural Resources conducted studies, using acoustic telemetry and genetics, to detail contributions by Grand River walleye to Great Lakes fisheries.</p>	Some people remain concerned about the safety of consuming sport fish from the Grand River.

Hunting

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Hunting Areas	<p>The GRCA offers hunting opportunities at the Luther Marsh Wildlife Management Area, Belwood Lake Conservation Area, Conestogo Lake Conservation Area, and 18 miscellaneous properties throughout the watershed. Hunters can pursue a variety of game, including deer, waterfowl, turkey, pheasant and other small game. Luther Marsh Wildlife Management Area is particularly notable, attracting hunters from across Ontario for its excellent waterfowl hunting on Luther Lake.</p> <p>Hunting is also done on private lands along the river.</p>	Minor changes to the GRCA's hunting program.		In 2018 the GRCA implemented a lottery system for hunting permits at Belwood Lake and Conestogo Lake CAs, high demand areas. In 2022, following a comprehensive review, the GRCA updated the list of properties on which it allows hunting.	
Controlled Hunts	GRCA and the OMNR support controlled hunts in various locations at specific times of the year.	None			

Trails and Corridors

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Trailheads and Access Points	We now have a network of trails with access points throughout the watershed.	Improvements in trail infrastructure	Growing demand for use	Various trail improvements and upgrades have been implemented across the GRCA's conservation areas. This includes erosion controls, installation of benches, and a community firepit at Rockwood Conservation Area; expanded nature trails, wayfinding and habitat restoration at Byng Island Conservation Area; and boardwalks installed along Laurel Creek Conservation Area trails.	
Multi-Purpose Trailways	New multi-purpose river trails are being developed throughout the watershed and linked together (this was part of the vision for the Grand that was included in our Stewardship Plan). Many people use the river trails for walking, hiking, running, birding/wildlife viewing cycling and photography.	Growing demand for use	Improvements in infrastructure and enhanced promotion of the Grand River as a destination for outdoor adventures.	See below.	Demand continues to grow
Hiking Pathways (single-use)	The Grand Valley Trail is a 250-kilometre footpath that stretches between the village of Belwood to Port Maitland, near Rock Point Provincial Park, on Lake Erie, south of Dunnville. It mostly follows the Grand River.	Growing demand for use Sections of the Walter Bean Trail along the Grand River through Kitchener have been damaged by erosion and river ice.	Growing populations and enhanced promotion of the Grand River as a destination for outdoor adventures Riverside trail infrastructure is vulnerable to flooding, erosion, and damage by river ice.	In 2022, the Grand Watershed Trails Network launched a new website (www.grandtrails.ca) to help cyclists, hikers, paddlers and tourists better plan their trips. The maps show river access points and link to local attractions and businesses. Municipalities continue to implement active transportation master plans and address needed trail improvements. The City of Cambridge built a new pedestrian bridge over the Grand River in 2018. As part of the "Back to the Rivers" vision for Cambridge, the new bridge increases connectivity to the river-scape and improves pedestrian and cycling connections within downtown Cambridge.	Demand continues to grow
Cycling Routes	Several cycling routes along the river have been developed.	Growing demand for use	Increased demand, particularly during the Covid pandemic, as well as expanding access to e-bikes. Investments in cycling infrastructure including rail trails and active transportation networks.	In 2024, Water Cycles, an initiative that connects communities with water through cycling, held a Bikes and Blues Festival in Elora/Fergus and volunteer-run bike rides in Waterloo, Elora, Fergus, and Luther Marsh. Other signature cycling events that celebrate the Grand River include the Paris to Ancaster Race, held April annually since the mid-1990s; the Tour de Guelph; and Dunnville Grand Tour.	Demand continues to grow

Active Parks

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Overnight Camping Areas	There are several private and public parks on the banks of the river which offer camping.	Ongoing improvement of facilities	High demand for camping in some areas	In 2019, the Elora Gorge Conservation Area campground reconfiguration was completed and included an addition of 50 new campsites to help provide increased overnight camping opportunities in the conservation area.	

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Day-Use and Picnic Areas	There are many private and public parks on the banks of the river where people can picnic.	New measures required to manage visitation	Increasing demand for outdoor experiences	<p>In 2016-2018, the GRCA installed automatic entry gates at three CAs. These systems have led to enhanced security, streamlined entry process, expanded operating hours, reduced wait times, generated revenue, and increased overall convenience for gatehouse staff and patrons.</p> <p>In 2021, an online reservation system was implemented at the Elora Quarry CA, along with limits on the number of daily visitors and designated pre-paid parking. These measures have resulted in positive outcomes, including reduced environmental impact, improved visitor experience, and minimized vehicle lineups on municipal roads.</p> <p>The GRCA's Conservation Area Activity Status webpage, developed during the pandemic, continues to be an important online feature. It allows visitors to check real-time data on whether a conservation area is closed, nearing capacity, or still welcoming visitors before their visit. The webpage has also evolved to include information on the status of amenities and activities, such as beaches, boat launches, and winter activities.</p>	Demand for outdoor recreational opportunities remains high

Winter Activities

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Snowmobiling and Dog Sledding	Belwood Lake Conservation Area offers snowmobiling opportunities.	None			
Cross-Country Skiing	Trails along the river can be used for cross-country skiing. Some GRCA parks offer groomed trails (i.e. Laurel Creek Conservation Area).	None			
Skating	No	None			

Nature Appreciation

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Outdoor Education Centres	Outdoor education opportunities for all ages exist through a number of outdoor centres owned and operated by the GRCA, school boards and others (i.e. Rare Charitable Research Reserve).	Many outdoor education centres were built decades ago and require substantive investment to maintain infrastructure.	Aging infrastructure and few sources of funding	The GRCA is undertaking a review of its Outdoor Environmental Education Program, moving towards a model that will allow some program delivery from Conservation Areas. The GRCA, with fundraising by the Grand River Conservation Foundation, broke ground on construction of a new Guelph Lake Nature Centre in 2024.	Yes
Wildlife Management Areas	Specific wildlife management areas provide opportunities for nature viewing and appreciation such as Luther Marsh and Dunnville Marsh.	None			
Organized Hikes	The Grand Valley Trails Association and other groups offer hikes to the public to increase nature awareness and appreciation.	None		Many trail organizations are active in leading hikes along watercourses and in natural areas, including the Grand Watershed Trails Network, Grand Valley Trails Association and many with local or regional geographic focus.	

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
River Lookouts	We have several organized/constructed lookouts for people to enjoy scenic views of the river (i.e. Murray Lookout on the Cambridge to Paris Rail Trail).	None			
Scenic River Views	Other scenic vistas have been identified in various planning documents and official plans which should be recognized.	None			
Scenic River Drives	The Grand River Scenic Parkway was developed after the designation of the Grand and helps promote awareness of the Heritage River designation.	None		Regional Tourism Organization #1 created an 85 km scenic motorcycle route along the Grand River in Haldimand County, titled “Cruise the Coast).	

Events and Festivals

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Cultural Festivals	There are many cultural festivals held throughout the watershed such as Oktoberfest in Kitchener- Waterloo, Applefest in St. George, Maple Syrup Festivals in Elmira and Perth and the Cobblestone Festival in Paris.	None			
River Festivals and Celebrations	There are a number of river celebration events such as the 2 Rivers Festival in Guelph, Dunnville Mudcat Festival and Riverfest Elora.	None		River Heritage Festival: This festival held on September 22, 2024, at the GRCA’s Brant Conservation Area celebrated the 30 th anniversary of the naming of the Grand River a Canadian Heritage River. Children’s Water Festivals are held throughout the watershed, educating thousands of school aged children and volunteers each year about their important role in protecting and conserving water.	

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Recreational Events	Many recreational events are offered annually such as the Grand River Bass Derby in the Region of Waterloo and Day of 1000 Canoes in Haldimand County.	None		<p>Grand River Conservation Areas continue to be popular venues for hosting a wide range of special events, attracting both local community groups and organizations from out of town. These areas are often appealing due to their scenic locations along the Grand River or local reservoirs, offering access to naturalized settings and water-based recreational activities. Over the years, they have hosted a variety of popular events, including fishing derbies, triathlons, charity walks, dragon boat races and film productions. A prominent event is the Hillside Festival, an annual three-day, multi-stage music festival held at Guelph Lake Conservation Area since 1987, which celebrates sustainability, diversity and local artistry.</p> <p>Shade's Mills Conservation Area has become a popular destination for cross-country enthusiasts, hosting numerous cross-country fun-runs and championship races.</p> <p>Rockwood Conservation Area partners with local organizations to promote personal health and the love of the outdoors. The local municipality organizes free weekly walking events for seniors, while the Community Resource Centre of North and Centre Wellington host a weekly parent and stroller walk. Additionally, agreements with local school boards allow students to visit and understand the importance of the outdoors. Rockwood and Elora Quarry Conservation Areas are also popular filming locations, which not only raises awareness of the conservation areas but also supports the surrounding local economies.</p>	

Cultural Tours

Category	Recreational Heritage Value	Description of Change in Value	Reason for Change	Actions Taken in Response	Is the Change or Threat Still Present?
Guided Walking Tours	Historical societies (i.e. Heritage Cambridge) offer walking tours during the summer months.	None			
Self-Guided Tours	Several municipalities offer self-guided walking tours to promote heritage appreciation.	None			

Appendix E: Integrity Guidelines

Natural Integrity Values

The Grand River was not designated a Canadian Heritage River based on its natural heritage values. However, in keeping with the Canadian Heritage Rivers System Principles, Procedures and Operational Guidelines (2024), natural heritage values are included in this report.

Integrity Guideline	Integrity Value	Change In Integrity Value	Threat or Stressor	Action(s) Taken to Address Threat	Threat Still Present?
The nominated section is of sufficient size to include significant representations of all of the natural processes, features, or other phenomena which give the river its outstanding natural value.	<p>The river was not designated based on its natural heritage values.</p> <p>The Grand is about 290 km in length and with its 4 major tributaries - the Nith, Conestogo, Eramosa and Speed Rivers it totals 627 km. A network of aquatic and terrestrial ecosystems, some of which are unique (i.e. Carolinian Zone) support many diverse populations of flora and fauna. The large size of the watershed also affords a wide variation in geologic representations.</p>	None			
The nominated section includes those ecosystem components which contribute significantly to the provision of habitat for species in need of protection.	<p>The river was not designated based on natural heritage values.</p> <p>The river provides the required water quantity and quality needed to support its features and species.</p>	None			
There are no human-made impoundments within the nominated section.	<p>The river was not designated based on natural heritage values.</p> <p>The Grand River contains a variety of impoundments. The GRCA owns and operates 7 dams and reservoirs built between 1942 and 1976 to address flooding, drought, and water quality problems. The GRCA owns another 21 small dams, many built in the 1800s and early 1900s for transportation, water power and water supply. Today they have primarily recreational, aesthetic or historical value.</p> <p>There are about 200 more dams in the watershed owned by municipalities and private landowners.</p>	None		The GRCA continues to maintain water infrastructure, including dams and dikes, as needed.	
All key elements and ecosystem components are unaffected by impoundments located outside the nominated section.	<p>See above.</p> <p>The river was not designated based on natural heritage values.</p>	None			

Integrity Guideline	Integrity Value	Change In Integrity Value	Threat or Stressor	Action(s) Taken to Address Threat	Threat Still Present?
The water in the nominated section is uncontaminated to the extent that its natural aquatic ecosystem is intact.	<p>The river was not designated based on natural heritage values.</p> <p>The Grand is a leading source of nutrients to the eastern basin of Lake Erie. Water quality issues in the river are influenced by wastewater treatment plant discharges, rural/agricultural non-point sources and urban non-point sources. Phosphorus and nitrate levels in the river, although improved since the 1970s, still remain high¹⁰.</p> <p>Although nutrient levels can be high, the river is still able to provide habitat to aquatic flora and fauna including a variety of species at risk.</p>	<p>Overall water quality changes slowly, but there have been reductions in some sources of pollution.</p> <p>Between 2012 and 2023, the GRCA has noted a 92% reduction in annual loading of total ammonia nitrogen and a 35% reduction in annual loading of total phosphorous being discharged by wastewater treatment plants in the Grand River watershed, despite the watershed population increasing by about 17% over the same period. These improvements are the result of WWTP upgrades and optimization¹¹.</p>	<p>Growing population requiring wastewater services within the assimilative capacity of the Grand River.</p> <p>Rural nonpoint sources continue to be a substantive source of nutrient loading to the Grand River.</p> <p>Changes in funding offered for water quality programs can risk progress in water quality improvement.</p>	<p>The collaborative, voluntary Grand River Water Management Plan (2014) includes strategies to address point and nonpoint sources of pollution to the Grand River.</p> <p>The GRCA continues to monitor water quality throughout the watershed through the Provincial Groundwater Monitoring Program, the Provincial Water Quality Monitoring Program, and via another 9 continuous water quality stations in the Grand and Speed rivers. The information helps support the GRCA's reservoir operations, calibration of water quality models, and reporting on water quality conditions.</p> <p>Upgrades and optimization of municipal wastewater treatment plants has resulted in reductions in nutrient loading to the Grand River.</p> <p>The GRCA delivers the Rural Water Quality Program and Watershed-wide Wastewater Optimization program to reduce rural nonpoint source and wastewater point source discharges of nutrients to the Grand River.</p> <p>The GRCA collaborates with provincial and federal partners to support the goal of reducing nutrient loading to Lake Erie through the Lake Erie Action Plan.</p>	<p>Yes. The watershed's population is projected to grow to over 1.5 million by 2051. More people generate more treated wastewater that will be discharged to the Grand River and its tributaries. The watershed continues to be home to intensive agricultural production.</p> <p>In 2024, the GRCA entered into 5-year funding agreements with watershed municipalities for delivery of monitoring, rural water quality and wastewater optimization programs.</p>
The natural aesthetic character of the nominated section is free of, or not adversely affected by, human developments.	<p>The river was not designated based on natural heritage values.</p> <p>New development is mostly limited to areas outside of the floodplain and river valleys due to environmental regulation and municipal official plan policies. However, some development does occur within the valley.</p>	<p>In some areas, development (i.e., residential) within the valley does hinder the potential for natural heritage viewscales. However, there are stretches of the river that are more natural. The Grand River Forest runs along the river from Cambridge to Paris in an almost unbroken 20-kilometre strip. It includes extensive uplands and swamp forest, bogs in kettle depressions, fens, remnants of prairie and oak savannah. Many Carolinian species flourish there.</p>			

¹⁰ Water Quality Working Group. 2013. [Sources of Nutrients and Sediments in the Grand River Watershed](#). Grand River Conservation Authority.

¹¹ GRCA. 2024. [2023 Watershed Overview of Wastewater Treatment Plant Performance](#). Grand River Conservation Authority.

Cultural Integrity Values

Integrity Guideline	Integrity Value	Change In Integrity Value	Threat or Stressor	Action(s) Taken to Address Threat	Threat Still Present?
The nominated section is of sufficient size to include significant representations of all of the features, activities or other phenomena which give the river its outstanding cultural value.	The watershed is of sufficient size that it possesses a deep and varied history that is seen today in the form of historic sites and monuments, heritage buildings and bridges. History is captured in museums and seen through remnant artifacts that still exist along the river's winding expanse.	Some cultural features have been lost (i.e., bridges), but many have also been rehabilitated, attempting to balance cultural values and public safety.		Adaptive reuse of buildings is also becoming increasingly popular.	
The visual character of the nominated section enables uninterrupted appreciation of at least one of the periods of the river's historical importance.	A number of municipalities have introduced Cultural Heritage Landscapes into their planning documents (i.e. Township of Woolwich – 2012, Township of North Dumfries – in progress, City of Cambridge – to begin after 2015). Heritage Conservation Districts have also been established /considered (i.e. Waterloo and Guelph).	The establishment of Cultural Heritage Landscapes and Heritage Conservation Districts help to protect the cultural history of areas located along the river. Pastoral vistas are common along the river.		Over the last decade, the Black Bridge Cultural Heritage Landscape was established and cultural heritage landscape studies completed by the townships of Woolwich, Wellesley, Centre Wellington, Wilmot and North Dumfries and the cities of Waterloo and Guelph. Heritage conservation district studies were undertaken by the cities of Guelph and Cambridge. Many municipalities are emphasizing their community's connection to the river through trails and restoration projects as well as adaptive re-use of old mills and historic buildings located along the river (i.e. Cambridge Gaslight District).	
The key artifacts and sites comprising the cultural values for which the river is nominated are unimpaired by impoundments and human land uses.	Not applicable. See the natural integrity guidelines above.	None			
The water quality of the nominated section does not detract from the visual character or the cultural experience provided by its cultural values.	In some locations nutrient levels can lead to excessive algae growth in the river which can be seen from the riverbanks or bridges.	See the natural integrity water quality value above and recreational integrity value below.			

Recreational Integrity Values

Integrity Guideline	Integrity Value	Change In Integrity Value	Threat or Stressor	Action(s) Taken to Address Threat	Threat Still Present?
The river possesses water of a quality suitable for contact recreational activities, including those recreational opportunities for which it is nominated.	Water quality in the river is such that recreational uses such as canoeing, kayaking and fishing remain popular.	See the natural integrity and cultural integrity water quality values above. Blue-green algae is observed in some of the GRCA's reservoirs most years. Blue-green algae thrive on nutrients from fields and lawns that find their way into local waterways and reservoirs during heavy rainfall and spring melts and cause their populations to grow rapidly, forming blooms or scum on the surface of the water. Some varieties of blue-	If climate change results in more frequent hot, dry weather, these impacts could become more common.	When blooms are present, recreational users of the reservoirs are reminded to take precautions (e.g., avoid swimming in affected areas).	Yes

Integrity Guideline	Integrity Value	Change In Integrity Value	Threat or Stressor	Action(s) Taken to Address Threat	Threat Still Present?
		green algae can produce toxins that are harmful to both people and pets, limiting water-based recreation.			
The river's visual appearance is capable of providing river travelers with a continuous natural experience, or a combined natural and cultural experience, without significant interruption by modern human intrusions.	The river traverses a variety of viewscales from agricultural to forested rural areas and built up urban areas.	See the cultural integrity value for visual character above.			
The river is capable of supporting recreational uses without significant loss of, or impact on, its natural and cultural values or its visual character.	The river supports a wide array of recreational uses such as fishing, boating and hiking without negatively impacting its ecosystems (i.e. fish populations), cultural or aesthetic value.	There is growing interest by tourism organizations to consider the impacts of river-based recreation on the Grand River.			


Appendix F: Management Plan Recommendations


Stewardship Plan Recommendation	Degree of Achievement	Comments
Develop community-based watershed-wide strategies for shared research, planning, decision-making, implementation and monitoring of important human heritage and recreational values associated with the Heritage River designation. Explore innovative and effective techniques for public involvement (including youth and seniors).	Ongoing	<p>The GRCA's role in maintaining the Canadian Heritage River designation is recognized in a new Conservation Areas Strategy (2024).</p> <p>Many municipalities are emphasizing their community's connection to the river through cultural heritage landscape planning.</p> <p>Regional Tourism Organizations are playing a growing role fostering collaborations on river-based recreation and tourism.</p>
Encourage, recognize and support private and public stewardship in conserving and interpreting the watershed's natural and human heritage.	Ongoing	<p><i>Currents of Change: Inspiring Action along the Grand River</i>, a new exhibit that opened at the Regional Municipality of Waterloo's McDougall Cottage Historic Site in June 2024. Through a blend of history, ecology, and Indigenous and settler narratives, this captivating exhibit examines the profound and dynamic connection between the Grand River, the City of Cambridge's heritage, and our collective future. The exhibit serves as a call to action for all to act as stewards of the Grand River.</p> <p>Examples of the stewardship work of some relevant groups are included in Appendices B and D.</p>
Raise awareness about and celebration of the designation of the Grand River as a Canadian Heritage River through existing and new community events.	Ongoing	<p>In 2024, the Canadian Heritage River designation was recognized through the <i>Currents of Change</i> exhibit described above, a River Heritage Festival held at Brant Conservation Area, and by many others at local and regional events.</p> <p>A Heritage Working Group, formed in the 1990s to help increase community involvement and commitment to the celebration and management of human heritage resources in the Grand River watershed, held 5 workshops over the past decade, attracting hundreds of participants.</p>
Examine and evaluate the effectiveness of existing heritage and recreational resource management arrangements. Document success and failure, share findings and identify best management practices.	Ongoing	<p>Regional Tourism Organizations have begun holding an annual forum to share information on river-based recreation and tourism in the Grand watershed.</p> <p>The Grand River Water Managers, a network of municipal, First Nations, and agency water managers, continues to advocate for implementation of the collaborative, voluntary Grand River Water Management Plan (2014). The goals of the Plan are to ensure sustainable water supplies, improve water quality, reduce flood damages, and enhance resilience to climate change. The first 5 years of implementation were documented in a Report on Actions (2014-2018).</p>
Encourage the incorporation and integration of strong heritage policies and appropriate recreation and tourism development policies in pertinent policy and planning documents.	Ongoing	<p>Changes to the Ontario Heritage Act in 2022 affected procedures and criteria for listing properties on municipal registers, designating properties under the Ontario Heritage Act, and establishing Heritage Conservation Districts. Municipalities continue to review and update municipal registers under the Ontario Heritage Act.</p> <p>Regional Tourism Organizations have fostered development of shared resources, such as the Access Point Standards Manual and Signage and Style Guide.</p>
Encourage research which can clearly demonstrate the economic and social benefits of our natural and human heritage resources.	Ongoing	<p>A partnership with the Collaborative Water Program at the University of Waterloo explored changes to heritage river values, culminating in a series of briefing notes and a workshop.</p> <p>New research partnerships are demonstrating Two-Eyed Seeing, ways of combining Indigenous and Western ways of knowing about the Grand River.</p>


Stewardship Plan Recommendation	Degree of Achievement	Comments
Encourage municipalities to develop special policies/plans to guide riverfront development. These policies and plans should be designed to resolve conflicting resource issues, to maintain/improve the quality of the experience and to provide for infrastructure to accommodate increasing interest.	Ongoing	Municipalities continue to develop policies and address potential conflicting uses through Master Planning and other studies.
Continue efforts to improve water quality and address new and emerging water quality issues.	Ongoing	<p>The collaborative, voluntary Grand River Water Management Plan (2014) includes strategies to address point and nonpoint sources of pollution to the Grand River.</p> <p>The GRCA continues to monitor water quality throughout the watershed through the Provincial Groundwater Monitoring Program, the Provincial Water Quality Monitoring Program, and via another 9 continuous water quality stations in the Grand and Speed rivers. The information helps support the GRCA's reservoir operations, calibration of water quality models, and reporting on water quality conditions.</p> <p>Upgrades and optimization of municipal wastewater treatment plants has resulted in reductions in nutrient loading to the Grand River.</p> <p>The GRCA delivers the Rural Water Quality Program and Watershed-wide Wastewater Optimization program to reduce rural nonpoint source and wastewater point source discharges of nutrients to the Grand River.</p> <p>The GRCA collaborates with provincial and federal partners to support the goal of reducing nutrient loading to Lake Erie through the Lake Erie Action Plan.</p>
Emphasize the designation of the Grand River as a Canadian Heritage River in funding submissions to governments, foundations and organizations and in newspapers, magazines and research publications, wherever possible.	Ongoing	The designation is noted where appropriate.
Develop a code of ethics for recreational use in the Grand River watershed.	Ongoing	
Implement the Grand River Fisheries Management Plan (GRFMP).	On hiatus	After many years of activity, the implementation committee for the Grand River Fisheries Management Plan is currently inactive as a result of changing provincial and GRCA priorities and retirement and changeover in knowledgeable participants.
Explore the opportunity for promoting the Grand River as a "water trail".	Ongoing	<p>Grand River Access Point Improvement Project: RTOs working with the GRCA, municipalities, and many other partners are assessing river usage and awareness and improving river access points. The project began with development of an Access Point Standards Manual and Signage and Style Guide. The new standards were piloted at Wilson's Flats in the Township of Centre Wellington and projects followed at Idlewood Creek in the City of Kitchener, West Montrose in the Township of Woolwich, the Cambridge to Paris Rail Trailhead in the City of Cambridge, and Otterbein Road in the City of Kitchener. Improvements have included parking, washrooms, canoe racks, picnic tables and benches, information kiosks and maps, garbage bins, and improved signage (e.g., river mile markers).</p> <p>Opportunities to paddle the Grand River are expanding. Six Nations Tourism offers guided tours that share information about First Nations beliefs, centred on the Haudenosaunee Thanksgiving Address. Grand River Rafting developed a new paddling route for the lower Grand River from York to Cayuga, named Steamboat Alley in recognition of the historical development of locks and canals for steamship passage by the Grand River Navigation Company. Grand River Experiences developed a Nith River guided canoe trip.</p>
Celebrate and build on successes.	Ongoing	

Appendix G: Condition of Plaques

Conestogo River	Located on the southwest corner of King St N and Northside Dr, Woolwich
General Condition of Plaque (select one)	<input checked="" type="checkbox"/> Good <input checked="" type="checkbox"/> Fair (will need repair soon) <input type="checkbox"/> Needs Repair
If needs repair has been checked, describe the necessary repairs required.	In very good condition. No repairs required. Stone monument is in very good condition as well.
If needs repair has been checked, indicate a date by which the repairs will be complete.	n/a
Image of Plaque	<p>Photo taken on March 6, 2023.</p> 

Eramosa River	Located along Wellington Rd 29, Guelph-Eramosa Township
General Condition of Plaque (select one)	<input type="checkbox"/> Good <input type="checkbox"/> Fair (will need repair soon) <input checked="" type="checkbox"/> Needs Repair
If needs repair has been checked, describe the necessary repairs required.	Sign not present. Frame and post rusted over.
If needs repair has been checked, indicate a date by which the repairs will be complete.	Replacement planned for 2025.
Image of Plaque	Photo taken on March 6, 2023 

Grand River	Located in Mill Race Park, Cambridge
General Condition of Plaque (select one)	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair (will need repair soon) <input type="checkbox"/> Needs Repair
If needs repair has been checked, describe the necessary repairs required.	Minor staining on plaque. Blue coloured backdrop in good condition. Gold coloured text in good condition. Many scratches on the gold coloured boarder. Minor corrosion throughout the metal frame. Sticker on leg (can be easily taken off)
If needs repair has been checked, indicate a date by which the repairs will be complete.	n/a
Image of Plaque	Photo taken on March 6, 2023 

Nith River	Located in Scott Park, New Hamburg
General Condition of Plaque (select one)	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair (will need repair soon) <input type="checkbox"/> Needs Repair
If needs repair has been checked, describe the necessary repairs required.	Minimal graffiti (marker) on back of sign.
If needs repair has been checked, indicate a date by which the repairs will be complete.	n/a
Image of Plaque	Photo taken on March 6, 2023 

Speed River	Located in John Galt Park, Guelph
General Condition of Plaque (select one)	<input type="checkbox"/> Good <input type="checkbox"/> Fair (will need repair soon) <input checked="" type="checkbox"/> Needs Repair
If needs repair has been checked, describe the necessary repairs required.	Plaque not found. Needs to be replaced.
If needs repair has been checked, indicate a date by which the repairs will be complete.	Replacement planned for 2025.
Image of Plaque	No photo taken on March 6, 2023.