



Raisin Region Conservation Authority

Board of Directors Meeting Agenda

April 21, 2022

3:00 p.m. at Cooper Marsh Visitors Centre

Immediately following the

Raisin Region Source Protection Authority Meeting

20020 County Rd 2, South Glengarry

	Page
1. Call to Order	
2. Approval of Agenda	
3. Declaration of Conflict of Interest	
4. Delegations / Presentations	
a) RRCA Project Update – PowerPoint Presentation (Staff)	
5. Approval of Minutes	
a) Minutes of March 17, 2022	1-3
6. New Business	
a) Vaccination Policy Update (Richard)	4-8
b) Point-Mouillée Restoration – Remedial Action Plan Project (Brendan)	9-11
c) Grass Cutting Tender (Pete)	12-13
d) Ontario Regulation 175/06 Policies Update (Phil)	14-44
7. Future Meetings	
RRCA Board of Directors starting at 3:00 p.m. – May 19 th , Jun 16 th	
8. Closed Session	
a) Property Matter (Lisa / Brendan)	

Adjournment

Richard Pilon
General Manager / Secretary-Treasurer

RAISIN REGION CONSERVATION AUTHORITY
BOARD OF DIRECTORS
MINUTES
MARCH 17, 2022

BENSON CENTRE, 800 SEVENTH ST. W, CORNWALL

PRESENT: Martin Lang, South Glengarry, Chair
David Smith, South Stormont, Vice-Chair
Bryan McGillis, South Stormont
Carilyne Hebert, City of Cornwall
Claude McIntosh, City of Cornwall
Robert Lefebvre, North Stormont
Jacques Massie, North Glengarry
Lyle Warden, South Glengarry

STAFF: Richard Pilon, General Manager/Secretary-Treasurer
Josianne Sabourin, Administrative Assistant
Phil Barnes, Team Lead Watershed Management
Sandy Crites, Finance Officer
Lissa Deslandes, Regulations Officer
Jessica Herrington, Stewardship Coordinator
Brendan Jacobs, Stewardship Specialist
Matthew Levac, Acting Watershed Planner
Vincent Pilon, Public Information Coordinator
Halya Petzold, Resource Specialist
Pete Sabourin, Team Lead, Field Operations
Lisa Van De Ligt, Team Lead, Communications & Stewardship
Jamie Would, Stewardship & Outreach Assistant

CALL TO ORDER

Martin Lang, Chair, called the meeting to order at 3:00 pm

APPROVAL OF AGENDA

RESOLUTION #30/22:

Moved by: Lyle Warden
Seconded by: Bryan McGillis

That the agenda be approved.

CARRIED

DECLARATION OF CONFLICT OF INTEREST

None

APPROVAL OF MINUTES

RESOLUTION #31/22:

Moved by: Bryan McGillis
Seconded by: Jacques Massie

That the minutes of the February 17, 2022 meeting of the Raisin Region Conservation Authority be approved.

CARRIED

NEW BUSINESS

COOPER MARSH BIODIVERSITY PROJECT

RESOLUTION #32/22:

Moved by: Lyle Warden
Seconded by: David Smith

That the Board of Directors approve the Cooper Marsh Biodiversity Project workplan, as presented.

CARRIED

GRASSLANDS ONTARIO AGREEMENT

RESOLUTION #33/22:

Moved by: Carilyne Hebert
Seconded by: Claude McIntosh

That the Board of Directors approve entering into a Memorandum of Understanding with Forests Ontario as a local delivery partner for the Grasslands Stewardship Initiative.

CARRIED

GRANT SUBMISSIONS

RESOLUTION #34/22:

Moved by: Jacques Massie
Seconded by: Bryan McGillis

That the Board of Directors retroactively approve requesting \$50,000 from the Ministry of Environment, Conservation and Parks to promote backyard conservation in the RRCA jurisdiction.

Further that the Board of Directors approve requesting \$5,000 from the SDG Regional Tourism Grant to support the Raisin River Canoe Race.

Further that the Board of Directors approve requesting \$10,000 from TC Energy to support the Raisin River Canoe Race.

Further that the Board of Directors approve requesting \$1,000 from Ontario Power Generation to support the RRCA's 2022 Family Fishing Day event.

Further that the Board of Directors approve entering into an agreement with funders, if requested, for successful funding applications.

CARRIED

ONTARIO REGULATION 175/06 POLICIES UPDATE

RESOLUTION #35/22:

Moved by: Claude McIntosh
Seconded by: David Smith

That the RRCA Board of Directors receive the Ontario Regulation 175/06 Policies update, as presented.

CARRIED

FUTURE MEETINGS

RRCA Board of Directors – April 21st , May 19th, Jun 16th (3:00 p.m. start for all meetings)

ADJOURMENT

RESOLUTION #36/22:

Moved by: Robert Lefebvre
Seconded by: Bryan McGillis

THAT the Board of Directors meeting of March 17, 2022 be adjourned at 4:15 pm.

Martin Lang
Chair

Richard Pilon
General Manager / Secretary-Treasurer



To: Board of Directors
From: Richard Pilon, General Manager
Date: April 12, 2022
Subject: Vaccination Policy Update

RECOMMENDATION:

That the RRCA's Vaccination Policy be amended or rescinded, as directed.

BACKGROUND:

Based on recommendations from the local Medical Officer of Health, the RRCA implemented an employee vaccination policy on October 19, 2021. This was due, in large part, to the Delta variant of COVID-19 which cause a rapid increase in positive cases.

DISCUSSION:

The mandatory proof of vaccinations was removed by the Provincial Government on March 1, 2022. Organizations and private businesses can still maintain vaccination policies should they be deemed appropriate. In eastern Ontario, some municipalities are rescinding their vaccination policies, some are amending them, while others are keeping their existing policies for the time being. For our neighbouring Conservation Authorities, South Nation do not have a vaccination policy and Rideau Valley rescinded their vaccination policy on April 11th.

After reviewing public health guidance, and consulting with neighbouring conservation authorities and local municipalities, it is recommended that the RRCA rescind or amend the existing vaccination and testing policy.

Staff are seeking direction on two proposed options:

- Option 1 - Rescind RRCA's Vaccination Policy (in line with Township of South Stormont)
- Option 2 - Maintain requirement of mandatory vaccination for new hires only (in line with the City of Cornwall)

The RRCA will continue to monitor the COVID-19 pandemic and implement measures based on the advice and recommendations of government and public health officials.

A handwritten signature in black ink, appearing to be 'R. Pilon', written over a horizontal line.

Richard Pilon
General Manager

Raisin Region Conservation Authority

COVID-19 Vaccination Policy

October 19, 2021

PURPOSE

The Raisin Region Conservation Authority (RRCA) has a responsibility and desire to take all reasonable precautions to protect the health and safety of its workforce.

To help reduce the risk of COVID-19 transmission, this mandatory workplace vaccination policy is an important measure that complements other workplace health and safety measures already in place including daily screening, physical distancing/masking, hand hygiene and enhanced cleaning.

This policy is in line with Public Health guidance and supports the direction that getting fully vaccinated against COVID-19 is the best defense against the virus, including the Delta variant.

This policy provides a framework for those entering RRCA workplaces regarding COVID-19 vaccination status.

APPLICATION

This policy applies to all RRCA employees, board members, volunteers, students and contractors.

EFFECTIVE DATE

This Policy is to take effect immediately.

POLICY REQUIREMENTS

A. EMPLOYEES

1. On or before October 29, 2021, all employees must:
 - (a) Confirm they are fully vaccinated against COVID-19¹; or
 - (b) Provide a documented medical reason for not being fully vaccinated against COVID-19; or
 - (c) Provide a documented personal sincerely held religious or creed-based reason for not being fully vaccinated against COVID-19.

¹ “full vaccination” means having received the full series of a COVID-19 vaccine or combination of COVID-19 vaccines approved by Health Canada (e.g., two doses of a two-dose vaccine series, or one dose of a single-dose vaccine series); and having received the final dose of the COVID-19 vaccine by October 15, 2021 (14 days prior to October 29, 2021).

All future employees of the RRCA must be fully vaccinated and be able to provide proof of vaccination, prior to commencing employment with the RRCA.

2. Effective November 1, 2021, employees who are unvaccinated for reasons other than clause 1(b) or 1(c) or who have not disclosed their vaccine status, must complete the EOHU's COVID-19 vaccination educational video by November 5, 2021. Upon completion of the education video, a downloadable/printable certificate of completion will be provided and will be required to be submitted to the General Manager/Secretary-Treasurer by November 8, 2021.
3. Effective, December 1, 2021, employees who are unvaccinated for any reason will be required to participate in regular rapid antigen testing for COVID-19 and provide a digital image of a negative test result to the General Manager/Secretary-Treasurer via email every Monday and Thursday morning prior to starting their work day, regardless of the days of the week that the employee is on site that week.

Those who receive a positive rapid antigen screening result must not report to work and must immediately inform the General Manager/Secretary-Treasurer of the result. The employee is required to immediately self-isolate, book a nasopharyngeal swab (PCR) test at one of the local community testing sites and call the General Manager/Secretary-Treasurer to report the results upon receipt and to allow the General Manager/Secretary-Treasurer to begin the contact tracing process as needed. Employees will thereafter follow the direction of the General Manager/Secretary-Treasurer in terms of next steps depending on the results of the PCR test.

Employee test results will be kept confidential to the General Manager/Secretary-Treasurer (and in limited need to know circumstances to key Team Leads) and will not be disclosed except as required for the purposes of implementing and enforcing this Policy, staffing, meeting Public Health requirements, and complying with partner directives.

Employees who are unvaccinated for reasons other than clause 1(b) or 1(c) will be required to cover any costs associated with the tests.

For the purposes of this policy the General Manager's vaccination policy compliance documentation will be submitted to the RRCA Chair and will be kept confidential.

B. BOARD MEMBERS, VOLUNTEERS, CO-OP STUDENTS, CONTRACTORS

4. On or before October 29, 2021, all board members, volunteers, Co-op students and contractors must:
 - (a) Confirm they are fully vaccinated against COVID-19²; or
 - (b) Provide a documented medical reason for not being fully vaccinated against COVID-19; or
 - (c) Provide a documented personal sincerely held religious or creed-based reason for not being fully vaccinated against COVID-19.
5. Effective, December 1, 2021, board members, volunteers, co-op students and contractors who are unvaccinated for any reason will be required to participate in regular rapid antigen testing for COVID-19. They must provide a digital image of a negative test result to the General Manager/Secretary-Treasurer, via email every Monday and Thursday morning before 8:30 a.m. or 24 hours in advance of entering a RRCA workplace or working in-person with RRCA staff, whichever is less.

Those who receive a positive rapid antigen screening result must not enter the workplace and must immediately inform the General Manager/Secretary-Treasurer of the result. The person is required to immediately self-isolate, book a nasopharyngeal swab (PCR) test at one of the local community testing sites and call the General Manager/Secretary-Treasurer to report the results upon receipt and to allow the General Manager/Secretary-Treasurer to begin the contact tracing process as needed. The person will thereafter follow the direction of local public health and the General Manager/Secretary-Treasurer in terms of next steps depending on the results of the PCR test.

Test results will be kept confidential to the General Manager/Secretary-Treasurer (and in limited need to know circumstances other key employees) and will not be disclosed except as required for the purposes of implementing and enforcing this Policy, staffing, meeting Public Health requirements, and complying with partner directives.

Board Members, volunteers and co-op students who are unvaccinated for reasons other than clause 4(b) or 4(c) will be required to cover any costs associated with the tests. Contractors will be required to cover any costs associated with the tests.

² “full vaccination” means having received the full series of a COVID-19 vaccine or combination of COVID-19 vaccines approved by Health Canada (e.g., two doses of a two-dose vaccine series, or one dose of a single-dose vaccine series); and having received the final dose of the COVID-19 vaccine by October 15, 2021 (14 days prior to October 29, 2021).

C. ACCOMMODATION

6. RRCA acknowledges its obligations under the Ontario *Human Rights Code* and will comply with its duty to accommodate in appropriate cases.
7. Employees, board members, volunteers, students and contractors who are not vaccinated due to a medical reason are to provide written proof from a licensed physician or nurse practitioner supporting the medical exemption. Those who are not vaccinated due to another protected ground as set out in the Ontario *Human Rights Code* should advise the General Manager/Secretary-Treasurer and the individual and RRCA will follow the requirements of the Ontario *Human Rights Code* with respect to the accommodation process. Employees, volunteers, students and contractors are expected to cooperate in this process and provide necessary documentation.

Failure by employees to adhere to the requirements of this Policy may result in discipline up to and including termination. Failure by board members, volunteers, Co-op students and contractors to adhere to the requirements of this Policy may result in them not being permitted to enter RRCA workplaces or work in-person with staff.

This Policy and these measures will remain in place until further notice and are subject to change in accordance with Public Health guidelines and directives.

Any concerns or questions related to this Policy should be directed to the General Manager/Secretary-Treasurer.



To: Board of Directors
From: Brendan Jacobs, Stewardship Specialist
Date: April 7, 2022
Subject: Point-Mouillée Restoration – Remedial Action Plan Project

RECOMMENDATION:

THAT the Board of Directors approve the Point-Mouillée Restoration – Remedial Action Plan Project workplan, as presented.

AND FURTHER THAT the Board of Directors approve entering into a 15-year agreement with the private property owner to ensure the maintenance and conservation of the Project.

BACKGROUND:

The St. Lawrence River at Cornwall was designated an Area of Concern (AOC) in 1987 by the International Joint Commission, under the Great Lakes Water Quality Agreement between Canada and the United States which included the development of a Remedial Action Plan (RAP). A RAP is a required cleanup plan for all designated AOCs in the Great Lakes / St. Lawrence River. These plans focus on restoring ecological impairments that resulted from historic human activity. The RRCA is part of the coordinated efforts with government, Indigenous, community, and industry partners to address identified environmental challenges through the RAP.

The St. Lawrence River offers many ecological, recreational, and economic beneficial water uses. When human activity negatively interferes with the use or enjoyment of a water use, it's called a Beneficial Use Impairment (BUI). This may include changes to the chemical, physical, or biological integrity of the ecosystem. For the St. Lawrence River AOC to be "delisted", or removed from the list of AOCs, there can no longer be any BUIs. Recognizing that it is not feasible to restore all BUIs completely due to human influences having permanent impacts on the natural environment, a set of "delisting criteria" have been set for each BUI. These are measurable environmental conditions that need to be achieved before the BUI can be considered restored and the AOC delisted.

This Project will help to address, through the various restoration and enhancement activities, the BUIs identified in the RAP as well as a recommendation found within the Remedial Action Plan Stage 2 Report: The Recommended Plan (Anderson et. al., 1997). Specifically, the RRCA plans to restore and enhance the Bainsville Bay Marsh which is one of three Provincially

Significant Coastal wetlands found within the AOC and has been identified as a corridor within the 2021 Natural Heritage System (United Counties of SDG and P&R, 2021.).

As approved by the Board, the RRCA applied for funding from Environment and Climate Change Canada in January 2021 (full funding secured and agreement signed in October 2021) and the Ministry of the Environment Conservation and Parks in October 2021 (full funding secured and agreement signed in March 2022) to restore a coastal wetland in the St. Lawrence River (Cornwall / Akwesasne) AOC.

DISCUSSION:

The Point Mouillée Restoration – Remedial Action Plan Project is a 3-year initiative. The Project aims to enhance the Bainsville Bay Marsh through the restoration of approximately 140 acres of privately-owned wetland habitat on Point-Mouillée.

The goals of the Project are to:

1. Ensure resiliency by improving form and function (e.g. long-term management planning and landowner agreement to ensure long-term management and conservation of the project)
2. Restore habitat quality and quantity (e.g. 5 hectares of open water habitat and 3 hectares of seasonally flooded habitat)
3. Enhance habitat quality and quantity (e.g. addition of habitat structure and plantings)
4. Community engagement (e.g. education and outreach opportunities)

Specifically, this project will address:

- RAP BUI # 3: Degradation of Fish and Wildlife Populations
 - Maintenance of marsh bird and amphibian populations and diversity at or above Great Lakes non-Area of Concern averages as determined by the Marsh Monitoring Program of Bird Studies Canada.
- RAP BUI #4: Loss of Fish and Wildlife Habitat
 - Create and initiate a plan to protect the number, the form and function of coastal provincially significant wetlands, with a goal of “no net loss” in area.
- RAP Stage 2 Report, Recommendation # 61 (p.122): Design a shoreline stabilization project for Point-Mouillée, based on the completed feasibility study, which incorporates fish habitat protection and enhancement measures.

The following table outlines the project's proposed workplan:

Items	2021	2022	2023	2024
Secure funding	X			
Engage partners	X	X		
Pre & post monitoring	X	X		X
Infrastructure maintenance		X	X	
Site preparation		X	X	
Habitat restoration & enhancements		X	X	
Reef design (Erosion Control)		X		
Long-term management planning			X	
Outreach		X	X	X

To date, RRCA staff have completed several site visits with the property owner and land manager to refine the restoration and enhancement activities and determine the condition of existing infrastructure (berms and pumps). Staff have also consulted with potential project partners at the River Institute and Ducks Unlimited Canada. Both organizations have expertise in the realm of wetland restoration, conservation, monitoring and their insights and expertise will lend greatly to the success of this project over time. Further site visits are planned for spring 2022 as we continue to inspect the site infrastructure, prepare for monitoring, and site preparation.

The long-term management plan will focus on ensuring the resiliency and viability of the wetland over time through adaptively managing and maintaining each of the habitat components on site. The long-term management of the project will be the responsibility of the landowner. The RRCA will provide on-going advice and guidance to the landowner over the course of the 15-year renewable agreement.

As part of this project, the RRCA will create wetland outreach resources to promote the importance of wetland conservation in our region. In consultation with the property owner and funders, the RRCA will develop a project communications plan (e.g. press release, social media, etc.).



Brendan Jacobs
Stewardship Specialist



Raisin Region Conservation Authority

18045 County Road 2, P.O. Box 429, Cornwall, ON K6H 5T2 Tel: 613-938-3611 Fax: 613-938-3221 www.rrca.on.ca

To: Board of Directors
From: Pete Sabourin, Team Lead, Field Operations
Date: April 11, 2022
Subject: Grass Cutting Tender

RECOMMENDATION:

That the Board of Directors award the procurement of grass cutting services to Cut By Me, as presented.

BACKGROUND:

Tenders were called for grass cutting of RRCA parks and facilities for the 2022 and 2023 seasons. The RRCA sites were added to the Township of South Glengarry's grass cutting procurement document and the closing date was March 23, 2022.

DISCUSSION:

Five (5) submissions were received for the following six (6) properties:

- R1 – Fly Creek Pond and Pumping Station (3.16 ac)
- R2 – Gray's Creek Conservation Area (19.9 ac)
- R3 – Charlottenburgh Park (15.77 ac)
- R4 – Cooper Marsh Conservation Area (8.28 ac)
- R5 – Loch Garry Dam (0.41 ac)
- R6 – Middle Lake Dam (0.36 ac)

The results of the tenders are summarized as follows and based on price per cut:

Bidder	R-1	R-2	R-3	R-4	R-5	R-6	Total
CSL Group	274	1,392	1,104	624	117	117	3,628
Cut by Me	40	340	150	115	15	15	675
EC Works	75	450	200	200	50	50	1,025
Grounds Guy	130	650	485	260	65	65	1,655
No Mow Worries	40	400	400	150	50	50	1,090
Roger Salmon & Sons	200	875	750	600	75	75	2,575

The method of work (scope) is described in the tender document as follows:

- The successful bidder is to establish a cutting and trimming program in cooperation with, and acceptable to, the Team Lead, Field Operations. A pre-season meeting will be required to ensure that all specified areas are cut. The cutting program is to include priorities such as special times and certain days for cutting. The height of the grass should not exceed 4" at any time. Typically, a cutting frequency of every seven (7) days is required.
- The contractor is responsible for the supply of all equipment and labour to complete the work assigned.
- The contractor must be able to vary working hours to suit the weather and have sufficient capacity to meet cutting requirements.

RRCA staff have reviewed and evaluated the tender documents. The Team Lead, Field Operations has met with the lowest bidder and is satisfied that they are suitable to perform the necessary work in 2022 and 2023. The lowest bidder is the recommended contractor.

There are sufficient budget amounts in the respective accounts for this procurement. The total price for the tender calculated at 20 cuts per site is \$13,500 plus HST.



Pete Sabourin
Team Lead, Field Operations



To: Board of Directors
From: Phil Barnes, Team Lead, Watershed Management
Date: April 14, 2022
Subject: Ontario Regulation 175/06 Policies Update

RECOMMENDATION:

That the Board of Directors receive the update on Ontario Regulation 175/06 Policies, as presented.

BACKGROUND:

Ontario Regulation 175/06, requires permission by the Raisin Region Conservation Authority for development in or on areas that are:

1. river or stream valleys;
2. wetlands;
3. areas where development could interfere with the hydrologic function of a wetland;
4. areas adjacent or close to the shoreline of the St. Lawrence River System or inland lakes; and
5. hazardous lands.

The Raisin Region Conservation Authority evaluates applications and issues permits through policies which have been approved by the Board of Directors in 2006.

DISCUSSION:

Policies provide guidance, consistency, accountability, efficiency, and clarity on how an organization operates.

The objectives of the RRCA's Regulation Policies include:

- prevent loss of life, minimize property damage and social disruption, and avoid public and private expenditure for emergency operations, evacuation, and restoration due to natural hazards and associated processes;
- restrict *development* that may, singularly or cumulatively, restrict riverine channel capacities to pass flood flows or reduce storage capacity in floodplains and *wetlands* resulting in increased flood levels and create potential danger to upstream and downstream landowners;
- restrict *development* within flood and erosion susceptible *river* or *stream* valleys and shorelines that may increase hazard risk, create new hazards, or aggravate existing hazards that would in future years require expensive protection measures;
- prevent interference with *wetlands*;

- avoid the degradation and loss of *significant natural features* and *hydrologic functions* in *river* or *stream* valleys, *wetlands*, shorelines, and *hazardous lands*, and promote restoration and enhancement, whenever possible;
- prevent *pollution* of surface and ground waters associated with *development* in *river* or *stream* valleys, *wetlands*, shorelines, and *hazardous lands*; and
- reduce potential nuisances associated with *development* by limiting the potential for floating objects and debris during flood events.

A draft policy document is attached for discussion. Staff will make a presentation at the April Board of Directors meeting to provide additional context



Phil Barnes, P.Eng.
Team Lead, Watershed Management

Regulation Policies

O. Reg. 175/06

Pursuant to Section 28 of the Conservation Authorities Act, R.S.O. 1990, c.27

Regulation of Development, Interference with Wetlands
and Alterations to Shorelines and Watercourses



Raisin Region
Conservation Authority

18045 County Road 2
PO Box 429
Cornwall, ON K6H 5T2

April 14, 2022

DRAFT

DRAFT

Suggested Citation

Raisin Region Conservation Authority. 2022. *Regulation Policies, O. Reg. 175/06.*

For Internal Use

Primary Author(s): Phil Barnes.

Revisions

Table 1: Revision history for Regulation Policies

Title	Effective Date	Revision summary
Regulation Policies		Draft for discussion
Board Approved Policy	January 10, 2013	Updates to internal policies for compliance with O. Reg. 175/06.
Principles and Policies Regarding the Administration of Development, Interference with Wetlands & Alteration to Shorelines & Watercourses	May 2006	Initial Version

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Table 1: Revision history for Regulation Policiesii

DRAFT

1 Introduction

2 Intent

3 Policy Objectives

The policy objectives related to administration of Ontario Regulation 175/06 include, but are not limited to:

- a. prevent loss of life, minimize property damage and social disruption, and avoid public and private expenditure for emergency operations, evacuation, and restoration due to natural hazards and associated processes;
- b. restrict *development* that may, singularly or cumulatively, restrict riverine channel capacities to pass flood flows or reduce storage capacity in floodplains and *wetlands* resulting in increased flood levels and create potential danger to upstream and downstream landowners;
- c. restrict *development* of flood and erosion susceptible *river* or *stream* valleys
- d. and shorelines that may increase hazard risk, create new hazards, or
- e. aggravate existing hazards that would in future years require expensive protection measures;
- f. prevent interference with *wetlands*;
- g. avoid the degradation and loss of *significant natural features* and *hydrologic functions* in *river* or *stream* valleys, *wetlands*, shorelines, and *hazardous lands*, and promote restoration and enhancement, whenever possible;
- h. prevent *pollution* of surface and ground waters associated with *development* in *river* or *stream* valleys, *wetlands*, shorelines, and *hazardous lands*; and
- i. reduce potential nuisances associated with *development* by limiting the potential for floating objects and debris during flood events.

4 Regulated Areas

5 Regulated Activities

6 General Policies to Prohibit or Regulate Development

6.1 General Policies

Development Prohibited

- (1) *Development*, interference, or alteration shall not be permitted within a *Regulated Area*, except in accordance with Sections 6.1(2), 7, and 8.

Permission to Develop

- (2) *Development*, interference, or alteration within a *Regulated Area* may be permitted where it is demonstrated through appropriate technical studies and/or assessments, site plans and/or other plans as required by the RRCA that:
 - a. the risk to public safety is not increased;
 - b. susceptibility to natural hazards is not increased or new hazards created;
 - c. there are no *adverse hydraulic or fluvial impacts* on rivers, creeks, streams, or watercourses;
 - d. there are no adverse impacts on the natural shoreline processes of the Great Lakes-St. Lawrence River System and *inland lakes*;
 - e. placing and removing *fill* is minimized;
 - f. there are no adverse hydrologic impacts on *provincially significant wetlands*;
 - g. *pollution*, sedimentation and erosion during construction and post construction is minimized using *best management practices* including site, landscape, infrastructure and/or facility design (whichever is applicable based on the scale and scope of the project), construction controls, and appropriate remedial measures;
 - h. access for emergency works and maintenance of flood or erosion control works is available;
 - i. works are constructed, repaired, and/or maintained according to *accepted engineering principles* and approved engineering standards or to the satisfaction of the RRCA, whichever is applicable based on the scale and scope of the project; and

- j. the control of flooding, erosion, dynamic beaches, *pollution*, or the *conservation of land* is not adversely affected during and post *development*, interference, or alteration.
- (3) Notwithstanding Section 6.1(1), *development*, interference, or alteration in a *Regulated Area* may be permitted subject to policies specified in Sections 7 and 8.
- (4) Applications for permission to undertake *development*, interference or alteration in *Regulated Areas* shall be accompanied by appropriate technical studies and/or assessments, site plans and/or other plans as required by the RRCA. These studies/plans shall demonstrate, to the satisfaction of the RRCA, how the applicable policies in Sections 6, 7, and 8 are met.
- (5) Technical studies and/or assessments, site plans and/or other plans submitted as part of an application for permit to undertake *development*, interference or alteration in *Regulated Areas* shall be completed at the applicant's expense by a *qualified professional* to the satisfaction of the RRCA.

Prohibited Uses

- (6) Notwithstanding Section 6.1(2), *development* shall not be permitted within a *Regulated Area* where the use is:
 - a. an institutional use associated with hospitals, nursing homes, pre-school, nurseries, day care or schools, where there is a threat to the safe evacuation of the sick, the elderly, persons with disabilities, or the young;
 - b. an essential emergency service such as fire, police, ambulance or electrical substation;
 - c. associated with the disposal, manufacture, treatment, transfer, or storage of *hazardous substances*;
 - d. associated with the outdoor storage of any materials, either temporary or permanent;
or
 - e. associated with an *assisted living facility*.

6.2 Validity of Permits

- (1) RRCA permits are valid for 24 months from the issue date.
- (2) Notwithstanding Section 6.2(1), the RRCA may issue a permit that is valid for a period up to 60 months where, in the opinion of the RRCA:
 - a. the project cannot be reasonably completed within 24 months from the day the permission is granted; or

- b. the project requires approvals or permits from other regulatory bodies that cannot reasonably be obtained within 24 months from the day the permission is granted.

7 Specific Policies to Prohibit or Regulate Development

7.1 River or Stream Valleys – Riverine Flooding Hazards

Development Prohibited

- (1) *Development* shall not be permitted within the *Riverine Flooding Hazard* except in accordance with Section 6.1 and Sections 7.1(2) through Section 7.1(29).

Permission to Development

- (2) *Development* within a *Riverine Flooding Hazard* may be permitted in accordance with Section 6.1 and where it is demonstrated that:
 - a. there is no feasible alternative site outside the *Riverine Flooding Hazard*;
 - b. *floodproofing* of additions is undertaken to the extent practical where *floodproofing* to the elevation of the *Regulatory Flood* is not feasible;
 - c. *floodproofing* of buildings or structures sets the lowest opening to be 0.3 metres above the elevation of the *Regulatory Flood*;
 - d. there is no risk of structural failure due to potential hydrostatic/dynamic pressures; and
 - e. *safe access* is established.

Residential

- (3) Notwithstanding Section 7.1(2), new *dwelling units* shall not be permitted within the *Riverine Flooding Hazard*.
- (4) Ground floor additions to residential buildings or structures may be permitted in accordance with Section 7.1(2) and where it is demonstrated that:
 - a. the ground floor addition will have a maximum footprint of 50 m² or, in the case of multiple additions, all additions combined will have a maximum footprint of 50 m²;
 - b. the number of *dwelling units* is the same;
 - c. all *habitable floor space* is at or above the existing ground floor elevation; and
 - d. any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*.

- (5) An additional storey to residential buildings or structures may be permitted in accordance with Section 7.1(2) and where it is demonstrated that the number of *dwelling units* is the same.
- (6) *Replacement* of residential buildings or structures may be permitted in accordance with Section 6.1 and where it is demonstrated that:
- the building or structure to be replaced is relocated outside the *Riverine Flooding Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible;
 - the number of *dwelling units* is the same or less;
 - the *replacement* building or structure shall be less than or equal to the original footprint;
 - the building or structure has *floodproofing* to standards set by the Ministry of Natural Resources Technical Guide - River and Stream Systems: Flooding Hazard Limit (2002);
 - any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*;
 - electrical, mechanical, and heating services are located above the level of the *Regulatory Flood*, wherever possible; and
 - there is no risk of structural failure due to potential hydrostatic/dynamic pressures.

Notwithstanding the foregoing, no permit shall be issued for *replacement* of damaged or destroyed buildings or structures where more than 60 months (five years) have passed since the building or structure was damaged or destroyed. *Replacement* does not include reconstruction of remnant foundations.

- (7) Relocation of residential buildings and structures may be permitted in accordance with Section 7.1(6) provided that the risk of flooding and property damage is reduced to the greatest extent possible.
- (8) Non-Habitable *accessory buildings or structures* associated with an existing residential use such as detached garages, tool sheds, and other similar structures may be permitted in accordance with Section 6.1 and where it is demonstrated that:
- there is no feasible alternative site outside the *Riverine Flooding Hazard*;
 - the building or structure is securely anchored such that it does not break free and aggravate flooding;

- c. *floodproofing* is undertaken to the extent practical, where *floodproofing* to the elevation of the *Regulatory Flood* is not feasible; and
 - d. there is no opportunity for conversion into *habitable floor space*.
- (9) Above or below ground swimming pools may be permitted in accordance with Section 6.1, and provided that:
- a. *floodproofing* of electrical facilities to the elevation of the *Regulatory Flood* is undertaken; and
 - b. all *fill*, except that approved for landscaping, is removed from the *Riverine Flooding Hazard*.

Commercial/Industrial

- (10) Additions to commercial/industrial buildings or structures may be permitted in accordance with Section 7.1(2) and where it is demonstrated that:
- a. the addition will have a maximum footprint of 100 m² or, in the case of multiple additions, all additions combined will have a maximum footprint of 100 m²; and
 - b. any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*.
- (11) *Accessory buildings or structures* associated with commercial/industrial uses may be permitted in accordance with Section 7.1(2) and where it is demonstrated that:
- a. the building or structure is securely anchored such that it does not break free and aggravate flooding; and
 - b. any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*.
- (12) *Replacement* of commercial buildings or structures may be permitted in accordance with Section 7.1(2) and where it is demonstrated that:
- a. the building or structure to be replaced is relocated outside the *Riverine Flooding Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible;
 - b. the *replacement* building or structure shall be less than or equal to the original footprint;
 - c. proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*;

- d. electrical, mechanical, and heating services are located above the level of the *Regulatory Flood*, wherever possible; and
- e. the risk of structural failure due to potential hydrostatic/dynamic pressures has been addressed through an appropriate study or review by a *qualified professional*.

Notwithstanding the foregoing, no permit shall be issued for *replacement* of damaged or destroyed buildings or structures where more than 60 months (five years) have passed since the building or structure was damaged or destroyed. *Replacement* does not include reconstruction of remnant foundations.

- (13) Above ground parking lots associated with an *existing use* located wholly or partially within the *Riverine Flooding Hazard* may be permitted in accordance with Section 7.1(2) and where it is demonstrated that the risk of property damage is minimized through site design and flood emergency plans.

Internal Renovations

- (14) Internal renovations to buildings or structures that change the use or potential use of the building or structure but provide for no additional *dwelling units* may be permitted provided that:
 - a. the internal renovation does not result in a new use prohibited by Section 6.1(6).
 - b. electrical, mechanical, and heating services are located above the level of the *Regulatory Flood*, wherever practically possible; and
 - c. the risk of structural failure due to potential hydrostatic/dynamic pressures has been addressed through an appropriate study or review by a *qualified professional*.

Septic Systems

- (15) *Replacement* of septic systems may be permitted within the *Riverine Flooding Hazard*, in accordance with Section 6.1 where there is no feasible alternative site outside the *Riverine Flooding Hazard* and where it is demonstrated that:
 - a. the placement of *fill* associated with the septic system does not have an impact on the control of erosion, *pollution*, or the *conservation of land*;
 - b. the septic system design establishes the distribution pipes at or above the *Riverine Flooding Hazard*;
 - c. the septic system is flood-proofed using a watertight cap to prevent ingress of flood waters to the main tank as well as appropriate valves to prevent back flow; and
 - d. the septic system is designed to withstand lateral and buoyant pressures associated with floodwaters.

- (16) New septic systems may be permitted within the *Riverine Flooding Hazard* in accordance with Section 6.1 where there is no feasible alternative site outside the *Riverine Flooding Hazard* and where it is demonstrated that:
- the placement of *fill* associated with the septic system does not have an impact on the control of flooding, erosion, *pollution*, or the *conservation of land*;
 - the septic system design establishes the stone layer at or above the *Riverine Flooding Hazard*;
 - the septic system is flood-proofed using a watertight cap to prevent ingress of flood waters to the main tank as well as appropriate valves to prevent back flow; and
 - the septic system is designed to withstand lateral and buoyant pressures associated with floodwaters.

Wells

- (17) A drilled well may be permitted within the *Riverine Flooding Hazard* in accordance with Section 6.1 where there is no feasible alternative site outside of the *Riverine Flooding Hazard* and the well casing is designed to an elevation of 0.3 metres above the *Regulatory Flood*.

Public Infrastructure

- (18) Public infrastructure including but not limited to, roads, sanitary sewers, utilities, water and sewage treatment plants, water supply wells, well houses, and pipelines may be permitted in accordance with Section 6.1 where there is no feasible alternative site outside the *Riverine Flooding Hazard* as determined through an *Environmental Assessment* or other *comprehensive plan* supported by the RRCA, and where it is demonstrated that:
- adverse hydraulic or fluvial impacts* are limited and any risk of flood damage to upstream or downstream properties is not increased or is minimized through site design and the affected landowner(s) is informed of the increased risk; and
 - there is no loss of flood storage wherever possible.
- (19) The maintenance and repair of public infrastructure may be permitted in accordance with Section 6.1 and where it is demonstrated that where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures adequately restore and enhance features and functions.

Recreational Uses

- (20) Recreational uses such as passive parks, trails and *river* access points and other uses deemed appropriate by the RRCA – but not including new campgrounds, new golf

courses or expansions to golf courses, marinas or permanent docks – may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. there is no feasible alternative site outside the *Riverine Flooding Hazard*;
- b. there is no loss of flood storage;
- c. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site, facility and/or landscape design and appropriate remedial measures adequately restore and enhance features and functions; and
- d. the risk of property damage is minimized through site and facility design and flood emergency plans.

(21) Marinas, permanent docks, and boathouses with no *habitable floor space* may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. there is no measurable loss of flood storage;
- b. facilities are designed to take advantage of existing impacted or open areas on the channel bank, wherever possible;
- c. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site, facility and/or landscape design and appropriate remedial measure adequately restore and enhance features and functions;
- d. electrical and mechanical services are located above the level of the *Regulatory Flood*, wherever possible; and
- e. the risk of property damage is minimized through site and facility design and flood emergency plans.

(22) Golf courses or golf course expansions may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. all associated permanent, closed structures including clubhouses, washrooms with septic systems and maintenance buildings are located outside of the Riverine Flooding Hazard;
- b. there is no loss of flood storage;
- c. *watercourse* crossings are minimized and designed in accordance with Section 8.1(3);
- d. the risk of property damage is minimized through site and facility design and flood emergency plans; and

- e. the risk of *pollution* from the application of fertilizers, herbicides, pesticides, insecticides, or other chemical or organic compounds is minimized and addressed in a turf management plan.

Dug-Out/Isolated Ponds

- (23) A new *Dug-Out or Isolated Pond* or a redesign of a *Dug-Out or Isolated Pond* may be permitted in the *Riverine Flooding Hazard* in accordance with Section 6.1 and where it is demonstrated that:
 - a. the pond is located outside of the *Riverine Erosion Hazard*; and
 - b. finished side slopes are stable.
- (24) Dredging of a *Dug-Out or Isolated Pond* may be permitted where it is demonstrated that:
 - a. all dredged material is removed from the *Riverine Flooding Hazard* and the *Riverine Erosion Hazard*;
 - b. finished side slopes are stable;
 - c. natural function is restored and enhanced to the extent possible; and
 - d. the risk of *pollution* and sedimentation during dredging operations is minimized.

Agricultural Structures

- (25) Additions to agricultural buildings or structures may be permitted in accordance with Subsections 7.1(2)a, 7.1(2)b, and 7.1(2)d and where it is demonstrated that:
 - a. the addition will have a maximum footprint of 100 m², or in the case of multiple additions, all additions combined will have a maximum footprint of 100 m²;
 - b. any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*; and
 - c. *floodproofing* is undertaken to the extent practical where *floodproofing* to the elevation of the *Regulatory Flood* is not feasible.
- (26) *Accessory buildings or structures* associated with agricultural uses may be permitted in accordance with Subsections 7.1(2)a, 7.1(2)b, and 7.1(2)d and where it is demonstrated that:
 - a. electrical, mechanical, and heating services are located above the level of the *Regulatory Flood*, wherever possible;
 - b. the building or structure is securely anchored such that it does not break free and aggravate flooding;

- c. any proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*; and
- d. *floodproofing* is undertaken to the extent practical where *floodproofing* to the elevation of the *Regulatory Flood* is not feasible.

(27) *Replacement* of agricultural buildings or structures may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. the building or structure to be replaced is relocated outside the *Riverine Flooding Hazard* or where this is not feasible, the building or structure is relocated to an area within the existing lot where the risk of flooding and property damage is reduced to the greatest extent, wherever possible;
- b. the *replacement* building or structure shall be less than or equal to the original footprint;
- c. proposed basement or crawl space is designed to facilitate services only and is not *habitable floor space*;
- d. electrical, mechanical, and heating services are located above the level of the *Regulatory Flood*, wherever possible; and
- e. the risk of structural failure due to potential hydrostatic/dynamic pressures has been addressed through an appropriate study or review by a *qualified professional*.

Notwithstanding the foregoing, no permit shall be issued for *replacement* of damaged or destroyed buildings or structures where more than 60 months (five years) have passed since the building or structure was damaged or destroyed. *Replacement* does not include reconstruction of remnant foundations.

(28) Relocation of agricultural buildings and structures may be permitted in accordance with Section 7.1(27) provided that the risk of flooding and property damage is reduced to the greatest extent possible.

(29) Agricultural Structures that reduce risks associated with erosion or *pollution* or promote the *conservation of land* may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. there is no feasible alternative site outside the *Riverine Flooding Hazard*;
- b. the risk of property damage is minimized through site design and flood emergency plans; and
- c. *floodproofing* is undertaken to the extent practical, where *floodproofing* to the elevation of the *Regulatory Flood* is not feasible.

7.2 St. Lawrence River Shoreline

Development Prohibited

- (1) *Development* shall not be permitted within the *Regulated Area* associated with the St. Lawrence River shoreline except in accordance with Sections 6.1 and 7.1.

Permission to Develop

- (2) *Development* within the *Regulated Area* associated with the St. Lawrence River shoreline may be permitted in accordance with Sections 6.1 and Section 7.1.

7.3 River or Stream Valleys – Riverine Erosion Hazards

Development Prohibited

- (1) *Development* shall not be permitted within the *Riverine Erosion Hazard* and the associated allowance except in accordance with Section 6.1 and Section 7.3(2).

Permission to Develop

- (2) *Development* within the *Riverine Erosion Hazard Allowance* may be permitted in accordance with Section 6.1 and where a site-specific geotechnical or engineering assessment based on established provincial guidelines and an appropriate *factor of safety* against slope failure or slipping establishes a more precise *Riverine Erosion Hazard* limit, and where it is demonstrated that:
 - a. there is no feasible alternative site outside the *Regulated Area*;
 - b. the proposed *development* is not subject to a *Riverine Erosion Hazard* or a *Riverine Flooding Hazard*;
 - c. there is no impact on existing and future slope stability;
 - d. the risk of creating new *Riverine Erosion Hazards* or aggravating existing *Riverine Erosion Hazards* caused by the *development* is *negligible*;
 - e. the potential of increased loading forces on the top of the slope is addressed through appropriate structural design;
 - f. the potential for surficial erosion is addressed by a drainage plan; and
 - g. access into and through the valley for preventative actions or maintenance or during an emergency is not prevented.

7.4 Wetlands and Areas of Interference

Provincially Significant Wetlands and Areas of Interference

Development Prohibited

- (1) *Development/Interference* within a *provincially significant wetland* or *development* within the 120 metres adjacent to a provincially significant wetland shall not be permitted except in accordance with Section 6.1 and Sections 7.4(2) to 7.4(8). This prohibition includes but is not limited to:
 - a. Buildings and structures
 - b. Stormwater management facilities
 - c. Open water features and ponds unless determined to be appropriate through an environmental assessment or similar study for conservation or restoration purposes
 - d. Construction of a new drain (either private or under the Drainage Act), including outlet improvements
 - e. Tile drainage
 - f. Peat extraction or related activities
 - g. Clear cutting
 - h. Alteration to existing grade by the movement of material or by the placement of fill materials either originating on or off site.

Permission to Develop

- (2) Public Infrastructure including but not limited to, roads, sanitary sewers, utilities, water supply wells, well houses, and pipelines, within a *provincially significant wetland* may be permitted in accordance with Section 6.1 and where it is demonstrated that:
 - a. an *Environmental Assessment* or other *comprehensive plan* supported by the RRCA, demonstrates that all alternatives to avoid wetland loss or interference have been considered and that the proposed alignment minimizes *wetland* loss or interference to the greatest extent possible; and
 - b. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* or *ecological functions* are minimized, and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions.
- (3) Boardwalks (e.g., narrow, raised, planked trails) within a *provincially significant wetland* may be permitted in accordance with Section 6.1 and where it is demonstrated that:
 - a. an *Environmental Impact Study* demonstrates minimal interference;
 - b. the boardwalk is above the *Riverine Flooding Hazard*;

- c. the boardwalk is constructed with materials that do not interfere with the *provincially significant wetland*; and
 - d. the design minimizes the *development* footprint.
- (4) Where an *Environmental Assessment* or other *comprehensive plan* is available and supported by the RRCA, the RRCA may request a more detailed site-specific study consistent with the *comprehensive plan*. This study will determine a more precise area *wetland* boundary in accordance with the current Provincial Wetland Evaluation System and demonstrate how the *hydrologic functions* and *ecological functions* of the *wetland* will be restored and enhanced.

Development within 120 metre adjacent lands

- (5) *Development* within an area of interference less than or equal to 120 metres from a *provincially significant wetland* may be permitted in accordance with Section 6.1, where there is no reasonable alternate location, and it has been determined there is no interference with the hydrological functions of the wetland or the that the impacts to hydrologic function are mitigated in a manner acceptable to the RRCA.
- (6) Peat Extraction within an area of interference may be permitted where a *wetland* impact study demonstrates that policies in Section 6.1 are met, and the affected area is rehabilitated to restore and enhance natural features and functions.
- (7) A *wetland* impact study may not be required in an area of interference situated between 30 and 120 metres from a *provincially significant wetland* if, in the opinion of the RRCA, the potential hydrologic impacts of the proposed *development* are *negligible*. This includes but is not limited to, single family residences, additions, and accessory structures for which less than one (1) hectare is required for grading.

Conservation Projects within Wetlands and Areas of Interference

- (8) *Wetland* conservation projects within *provincially significant wetlands* and *areas of interference* may be permitted where a *wetland* impact study demonstrates how the *hydrologic functions* and *ecological functions* will be protected, created, restored, and/or enhanced.

7.5 Inland Lakes

Lands adjacent or close to the shorelines of *inland lakes* with a surface area greater than 2 hectares (5 acres) are subject to flooding and erosion. *Development* adjacent to *inland lakes* requires RRCA permission.

Hazards adjacent to *inland lakes* are delineated in a manner consistent with the *Riverine Flooding Hazard* and the *Riverine Erosion Hazard*.

- (1) *Development* along *inland lake* shorelines impacted by flooding or erosion hazards shall not be permitted except in accordance with Sections 6.1, 7.1, and 7.4.

- (2) Notwithstanding Section 7.5(1), *development* shall not be permitted for the uses described in Section (6).

7.6 Hazardous Lands

Development within or adjacent to *hazardous lands* requires permission from the RRCA.

Development Prohibited

- (1) *Development* within *hazardous lands* shall not be permitted except in accordance with Section 7.6(2).

Permission to Develop

- (2) *Development* may be permitted within *hazardous lands* in accordance with Section 6.1 and where a technical site-specific study and/or an *Environmental Impact Study* done by a *qualified professional* establishes a more precise hazard land boundary and where it is demonstrated that:
- a. there is no feasible alternative site outside the *Regulated Area*; and
 - b. the risk of instability that would result in structural failure or property damage is minimized.

Prohibited Uses

- (3) Notwithstanding Section 7.6(2), *development* shall not be permitted in *hazardous lands* for the uses described in Section (6).

8 Policies for the Alteration of Watercourses

8.1 Straightening, Changing, Diverting or Interfering with an Existing Channel

Alterations Prohibited

- (1) Straightening, changing, diverting, or interfering with existing *river, creek, stream, or watercourse* is not permitted except in accordance with Section 6.1, and Sections 8.1(3) through Section 8.1(19). This prohibition includes but is not limited to:
- a. culvert placement or replacement;
 - b. bridge construction;
 - c. bed level crossings;
 - d. piping of watercourses;
 - e. installation or maintenance of pipeline crossings;

- f. cable crossings;
- g. construction or maintenance of by-pass;
- h. connected or online ponds;
- i. straightening and diversions; and
- j. any work within the bed or banks of the watercourse for the purpose of erosion control or remedial works.

Permission to Alter

- (2) Any alteration to the channel of a river, creek, stream, or watercourse requires permission from the RRCA.

Crossings

- (3) Crossings including, but not limited to, bridges, culverts, pipelines, channel *enclosures* of less than 20 metres and causeways may be permitted to be constructed, replaced or upgraded in accordance with Section 6.1 and Sections 7.1(18) through 7.1(20) and/or Section 7.1(23), where appropriate, and provided that all feasible alternative sites and alignments have been considered through an *Environmental Assessment* supported by the RRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project, and where it is demonstrated that:
 - a. crossings avoid any bends in the *watercourse* to the extent practical;
 - b. crossings are located to take advantage of existing impacted or open areas on the channel bank or valley slope, wherever possible;
 - c. crossing structures avoid the *Riverine Erosion Hazard* to accommodate natural *watercourse* movement, wherever possible;
 - d. the risk of flood damage to upstream or downstream properties is reduced through site and infrastructure design, wherever possible;
 - e. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions;
 - f. physical realignments or alterations to the *river, creek, stream, or watercourse* channel associated with a new crossing are avoided or are in accordance with Section 8.1(17) and
 - g. maintenance requirements are minimized.

Water Control Structures

- (4) Water Control Structures to protect existing *development* or other uses deemed appropriate by the RRCA from the *Riverine Flooding Hazard* including dykes and berms, but not dams, may be permitted to be constructed maintained or repaired in accordance with Section 6.1 and where it is demonstrated that:
- a. all feasible alignments have been considered through an *Environmental Assessment* supported by the RRCA or other site-specific technical studies, whichever is applicable based on the scale and scope of the project; and
 - b. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized, and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions.

Dams

- (5) *Dams* may be permitted where it is demonstrated that:
- a. all feasible alternative sites and alignments have been considered through an *Environmental Assessment* supported by the RRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project;
 - b. the water management benefits of the *dam* are demonstrated to the satisfaction of the RRCA;
 - c. *pollution*, sedimentation and erosion during construction and post construction are minimized using *best management practices* including site, landscape, infrastructure design, construction controls, and appropriate remedial measures;
 - d. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized, and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions; and
 - e. works are constructed according to *accepted engineering principles* and approved engineering standards or to the satisfaction of the RRCA, whichever is applicable based on the scale and scope of the project.
- (6) Alterations to *dams* may be permitted where it is demonstrated that:
- a. *pollution*, sedimentation and erosion during construction and post construction are minimized using *best management practices* including site, landscape, infrastructure design, construction controls, and appropriate remedial measures;
 - b. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized, and it is demonstrated that *best management practices* including

- site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions;
- c. there are no adverse impacts on the capacity of the structure to pass flows;
 - d. the integrity of the original structure is maintained or improved; and
 - e. works are altered according to *accepted engineering principles* and approved engineering standards or to the satisfaction of the RRCA, whichever is applicable based on the scale and scope of the project.
- (7) The retirement of *dams* or the removal of *dams* that are structurally unsound or no longer serve their intended purpose, located within a *river, stream, creek* or *watercourse* may be permitted where an *Environmental Assessment* or a detailed decommissioning plan supported by the RRCA demonstrates that:
- a. all potential hydrologic and ecological impacts have been identified and considered;
 - b. *significant natural features* and *hydrologic functions* within or adjacent to the *river, creek, stream, or watercourse* are restored and enhanced through the retirement or removal of the structure and a site restoration plan supported by the RRCA;
 - c. the risk of *pollution* and sedimentation during and after retirement or removal is addressed through a draw down plan supported by the RRCA; and
 - d. susceptibility to natural hazards is not increased or new hazards created.

Conservation Projects within or Adjacent to a River, Creek, Stream, or Watercourse

- (8) Conservation projects such as *stream* rehabilitation works, small impoundments and realignments that restore or enhance *watercourse* morphology or aquatic health and habitat may be permitted in accordance with Section 6.1 and provided that:
- a. the hydrologic and ecological benefits of the project are demonstrated to the satisfaction of the RRCA;
 - b. *stream* bank stability is enhanced;
 - c. *significant natural features* and *hydrologic functions* are restored and enhanced using *best management practices* including site and/or infrastructure design and appropriate remedial measures;
 - d. natural channel design principles are followed to the extent possible; and
 - e. maintenance requirements are minimized.

Erosion and Sediment Control Structures

- (9) Erosion and sediment control structures to protect existing *development* and other uses deemed appropriate by the RRCA may be permitted in accordance with Section 6.1 and where it is demonstrated that:
- a. erosion risk on adjacent, upstream, and/or downstream properties is reduced or erosion and sedimentation processes are controlled to reduce existing or potential impacts from adjacent land uses, whichever is appropriate;
 - b. natural channel design principles are followed to the extent possible;
 - c. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized, and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions; and
 - d. maintenance requirements are minimized.

Maintenance of Dams or Erosion and Sediment Control Structures

- (10) The maintenance and repair of *dams* or erosion and sediment control structures may be permitted where it is demonstrated that:
- a. *pollution* and sedimentation during maintenance and repair activities is minimized using *best management practices* including site and infrastructure design, construction controls and appropriate remedial measures;
 - b. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized, and it is demonstrated that *best management practices* including site and infrastructure design and appropriate remedial measures will adequately restore and enhance features and functions;
 - c. susceptibility to natural hazards is not increased or new hazards created; and
 - d. works are maintained or repaired according to *accepted engineering principles* and approved engineering standards or to the satisfaction of the RRCA based on the scale and scope of the project.

Ponds

- (11) Connected ponds with no water intakes from the *watercourse* but which outflow into the *watercourse* may be permitted provided that the provisions of Section 6.1 are met, and a site plan and/or other site-specific study demonstrates that:
- a. there is no negative impact on the downstream water quality; and

- b. maximum berm heights above existing grades do not exceed 0.3 metres within the Riverine Flooding or Erosion Hazard and all remaining *fill* is removed from the hazard area.
- (12) Bypass ponds connected to *watercourses* created as part of site restoration plan or a conservation project may be permitted subject to the provisions of Section 8.1(11), and where it is demonstrated that the water intake is set above the elevation that permits continuous flow (i.e., refreshing of the pond will depend on increased water flows from snow melt and rainfall events).
- (13) On-Line ponds in a *watercourse* are not permitted except as specified in Sections 8.1(5) and 8.1(12).
- (14) On-Line ponds at the upstream end of *watercourses* may be permitted for *wetland* restoration and fish and wildlife habitat enhancement in accordance with Section 6.1 and where a site plan and/or other site-specific study demonstrates that there are no negative impacts on areas of groundwater recharge/discharge.
- (15) Dredging of an existing connected, bypass or on-line pond may be permitted in accordance with Section 7.1(23).

Dredging of a Watercourse

- (16) Dredging of a *watercourse* may be permitted to improve hydraulic characteristics and fluvial processes or to improve aquatic habitat or water quality in accordance with Section 6.1 and where a dredging plan and/or other site-specific study demonstrates that:
- a. *stream* bank stability is maintained or improved;
 - b. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site design and appropriate remedial measures will adequately restore and enhance features and functions; and
 - c. all dredged material is removed from the Riverine Flooding and Erosion Hazard and safely disposed of.

Realignment, Channelization or Straightening

- (17) Realignment, channelization or straightening of a *river*, *creek*, *stream* or *watercourse* may be permitted to improve hydraulic characteristics and fluvial processes or to improve water quality in accordance with Section 6.1 and where a site plan and/or other site-specific study demonstrates that:

- a. all feasible alternative alignments have been considered through an *Environmental Assessment* supported by the RRCA or through site-specific studies, whichever is applicable based on the scale and scope of the project;
- b. *stream* bank stability is enhanced;
- c. where unavoidable, intrusions on *significant natural features* or *hydrologic functions* are minimized and it is demonstrated that *best management practices* including site design and appropriate remedial measures will adequately restore and enhance features and functions; and
- d. natural channel design principles are followed to the extent possible.

Enclosures

(18) *Enclosures of creeks, streams or watercourses* may be permitted where there is a risk to public safety and/or potential property damage and where a site-specific study demonstrates that:

- a. all feasible options and methods have been explored to address the hazard(s) and the *enclosure* is supported by the RRCA;
- b. the risk of public safety is reduced;
- c. susceptibility to natural hazards is reduced and no new hazards are created;
- d. there are no negative or adverse hydrological impacts on *wetlands*;
- e. *pollution*, sedimentation and erosion during construction and post construction is minimized using *best management practices* including site and infrastructure design, construction controls, and appropriate remedial measures;
- f. intrusions within or adjacent to the *river, creek, stream, or watercourse* are minimized and it is demonstrated that *best management practices* including site design and appropriate remedial measures will adequately restore and enhance features and functions to the extent possible; and
- g. works are constructed, repaired, and/or maintained according to *accepted engineering principles* and approved engineering standards or to the satisfaction of the RRCA, whichever is applicable based on the scale and scope of the project.

Shoreline Protection

(19) Shoreline protection/improvement projects may be permitted in accordance with Section 6.1 and where it is demonstrated that:

- a. alignment results in no significant effects on *river* hydraulics;

- b. transitions from proposed protection to adjacent shorelines is designed to mitigate local erosion, debris accumulation, or undesirable changes in local current;
- c. the design incorporates adequate drainage features; and
- d. there is no danger from marginally stable or unstable slopes.

9 Definitions

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10 References

Conservation Authorities Act. (1990).

Lakes and Rivers Improvement Act. (1990).

Ontario Ministry of Natural Resources. (2002). Technical Guide River & Stream Systems:
Flooding Hazard Limit.

Ontario Regulation 175/06: Raisin Region Conservation Authority: Regulation of Development,
Interference with Wetlands and Alterations to Shorelines and Watercourses. (n.d.).

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