

Working Around Contaminated Sediments along the Cornwall Waterfront

What You Need to Know
June 2005

The purpose of this guidance document is to provide information to those considering any type of activity that may disturb contaminated sediment along the Cornwall waterfront. The guidance document provides information on the permitting application review process and identifies the required agency approvals. It also outlines the principles that form the basis of decision-making with respect to development and other activities proposed along the Cornwall waterfront.











Why are we concerned about contaminated sediments

Over the course of more than 70 years of industrial activity along the Cornwall waterfront, contaminants such as mercury, zinc, copper and lead were discharged into the St. Lawrence River and accumulated in sediment along the waterfront. Of these contaminants, mercury has been identified as the main contaminant of concern.

As they currently exist, historically contaminated sediments in three zones along the Cornwall waterfront are stable, and covered with a cleaner layer of sediment. The deeper contaminated materials are isolated from the aquatic environment and do not pose a significant ecological risk. However, certain development activities requiring dredging, filling, covering, piling, or scouring have the potential to disturb, expose or re-suspend the deeper more contaminated sediments. Disturbance of the sediments may directly or indirectly uncover and re-suspend mercury contaminated sediments, which may:

- impact the river's aquatic environment;
- affect fish, wildlife and their habitats;
- increase the amount of mercury in the food chain;
- provide a risk to human health through consumption of fish;
- expand areas of contamination;
- impact downstream water users; and
- impede future remedial measures in these areas.

What is the Cornwall Sediment Strategy

The Cornwall Sediment Strategy is a multi-agency and community partnership to develop a sediment management strategy for the Cornwall waterfront. The project is part of the implementation of the St. Lawrence River Remedial Action Plan (RAP) for sediment management.

Since 1987 the Governments of Canada and Ontario have worked together with the local community to develop and implement the St. Lawrence River (Cornwall) RAP. To fulfill the federal and provincial commitments to the implementation of this RAP, Environment Canada and the Ontario Ministry of the Environment initiated and coordinated a multi-agency and community partnership to work together to develop the Cornwall Sediment Strategy. The Cornwall Sediment Strategy was finalized in 2005 and states that historically contaminated sediment deposits should be left in place, undisturbed, to allow natural recovery to continue.

What are Administrative Controls

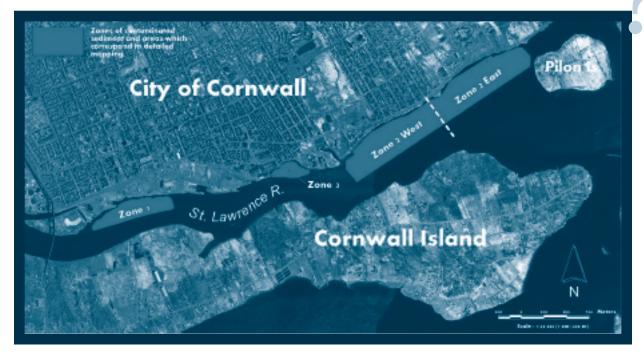
Administrative controls are the planning approval and permit control mechanisms that municipal, provincial, federal governments, and the Mohawk Council of Akwesasne can apply to regulate development activities.

An Accord and an Administrative Controls Protocol have been signed by seven parties including the federal, provincial, municipal and First Nation governments. The Accord and the Protocol clarify the commitment these parties have to harmonize the review of planning and permit approvals and to work together in a cooperative, coordinated and integrated fashion to prevent the disturbance, exposure and re-suspension of contaminated sediments within the three contaminated sediment zones. The protocol represents an inter-agency commitment to collaboration for the long-term protection of sediments along the Cornwall waterfront.

Parties to Protocol

- Environment Canada (EC)
- Department of Fisheries and Oceans (DFO)
- Ontario Ministry of the Environment (MOE)
- Ontario Ministry of Natural Resources (MNR)
- Mohawk Council of Akwesasne (MCA)
- Raisin Region Conservation Authority (RRCA)
- City of Cornwall (City)

Where are the contaminated sediments zones located



I'm considering a *building* project along the Cornwall waterfront. What do I have to do to get *approval*

All agencies participating in the Administrative Controls Protocol have their own legislation that must be considered as part of the permitting and approvals process. The Administrative Controls Protocol for the Cornwall Sediment Strategy coordinates and integrates their review process to ensure a thorough and harmonized review of your permit application. Your primary contact is the Raisin Region Conservation Authority (RRCA), however, all parties have agreed to help you to understand and initiate the process.

Here are the steps you need to take for any development or activity that may disturb contaminated sediments along the Cornwall waterfront:

Before beginning any work on your shoreline, contact the Raisin Region Conservation Authority (RRCA). They can help you with your project plan and put you in touch with other agencies whose approval you may also require. The call may save you time and money and avoid unnecessary delays.

If there is any possibility that your project might disturb, expose or re-suspend contaminated sediments in the three zones identified on the map, contact the RRCA for further assistance before submitting your application.

STEP 1

Contact the RRCA to determine if your proposed activity is within the contaminated sediment zones or adjacent areas – If your project is in or adjacent to the contaminated sediment zones, contact the RRCA to review the larger maps in order to confirm the location of your project. The RRCA will provide you with information on who to contact and what information and applications have to be submitted. An initial discussion with the RRCA will help to determine the feasibility of your proposed activity.

STEP 2

Complete and Submit Application(s) - Complete and submit all application(s) to appropriate agencies (listed under "What information is needed to complete a permit application?").

STEP 3

Agencies Review Application - Each agency may review your application in accordance with their requirements and may meet with all parties to the Protocol to discuss the application. Each agency provides their decision to the RRCA.

STEP 4

RRCA Notifies Proponent of Decision - The RRCA will contact you with a decision to approve or deny your application. If your application is denied or you disagree with the conditional consent of approval, you should contact the appropriate agency to consider your options in accordance with the provisions of the applicable legislation as noted in the decision.

STEP 5

Monitoring Compliance - You are responsible for ensuring compliance with the conditions of approval throughout your construction phase. Any agency may visit your site at any time to ensure compliance.

What guides an agency's decision

The Administrative Controls Accord and Protocol was signed by seven government parties to harmonize their approvals for any development or activity that occurs in or near the three zones. The parties to the protocol have agreed to apply the following principles to guide their decisions on any application.

Each agency will review your application according to their legislation. In addition to the legal requirements, each agency will consider its approval according to the guiding principles (see text box opposite) and the following Decision Making Process of the Cornwall Sediment Strategy, Administrative Controls Protocol.

A change in the location or the type of construction technique, such as the use of floating or cantilevered structures that are connected to the shoreline may avoid areas with contaminated sediments. Contact the RRCA to discuss other ways of reducing your impacts on contaminated sediments.

• Prevent Disturbance

There must be no disturbance, exposure or re-suspension of contaminated sediments within Zones 1, 2 and 3.

Apply Decision Making Process

All projects must be assessed based upon the application of the following design criteria in decreasing order of priority: Relocate, Redesign and Remediate.

No Impediment to Future Remedial Activities

No development or activity may impede future remedial measures to address contaminated sediments.

■ Remediate Full Extent of Zone

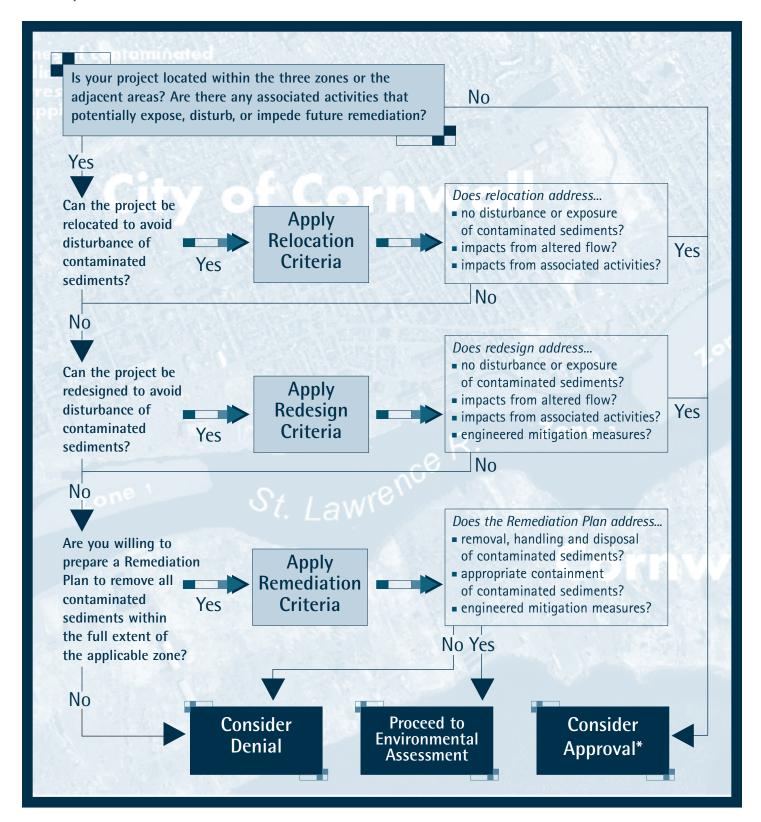
Projects that cannot be relocated or redesigned and may potentially disturb any sediments must have a remediation plan that indicates how all contaminated sediments, within the full extent of the zone, will be removed in a safe and environmentally protective manner.

■ Proponent is Responsible for Costs

The proponent is responsible for all costs, including engineering reports and the removal, handling and disposal of contaminated sediments.

Decision Making Process

The "Decision Making Process" outlined below shall be applied to the review of all project applications involving the participating agencies located in the three zones of contaminated sediments or in adjacent areas.



^{*} Pending consideration of applicable legislation

Who *reviews* my application and under what *legislation*

All parties to the Protocol may be involved in the review of any development or activity proposed in the three zones of contaminated sediments.

Raisin Region Conservation Authority

The Raisin Region Conservation Authority (RRCA) is responsible for the administration of the Fill, Construction and Alteration to Waterways Regulations made under Section 28 of the *Conservation Authorities Act*. The regulation is designed to consider the effects of filling, construction of structures, and the modification/alteration to watercourses in order to prevent flooding and erosion, slope stability and pollution. The intent is to preserve water quality and the conservation of land as well as prevent the creation of new problems or the aggravation of existing problems on and off the site.

A permit is required for activities in the RRCA's regulated areas that involve:

- The placing or dumping of fill;
- The construction of buildings/structures;
- The straightening, changing or diverting or interfering in any way with the existing channel of a watercourse/ river.

For more information contact:

Raisin Region Conservation Authority PO BOX 429, 18045 County Rd #2

Cornwall, Ontario, K6H 5T2 Phone: (613) 938-3611

Fax: (613) 938-3221

Website: http://www.rrca.on.ca/

Email: info@rrca.on.ca

Ministry of Natural Resources

The Ministry of Natural Resources (MNR) is responsible for the management of Crown Lands through the *Public Lands Act* and the *Lakes and Rivers Improvement Act*.

According to Ontario Regulation 453/96, pursuant to the *Public Lands Act*, work permits are required for:

- The construction of a building on public land;
- Construction of a trail, road and water crossings on public lands;
- Dredging of shorelands;
- Filling of shorelands;
- Removal of aquatic vegetation from specific shorelands; and
- Construction on shorelines that occupies more than 15 square metres.

According to Ontario Regulation 454/96, pursuant to the *Lakes and Rivers Improvement Act*, approvals are required for:

- Construction or improvements of dams;
- Private water crossings draining an area > 5 sq km.;
- Covering a portion of a river or stream exceeding 20 metres long; and
- Installation of a cable or pipeline if it results in damming, forwarding or the diversion of water.

For more information contact:

Ministry of Natural Resources Kemptville District Office 10 Campus Drive Postal Bag 2002,

Concession Road, KOG 1J0 Phone: (613) 258-8204

Fax: (613) 258 3920

City of Cornwall

The City of Cornwall is responsible for land use planning of all private lands located within its municipal boundaries. Applications for development approvals are required, pursuant to the *Ontario Building Code* and the *Planning Act*, such as:

- Building permits for the construction of buildings and structures greater than 10 sq metres (108 sq ft);
- Site Plan Agreements for any commercial or industrial development;
- Plan of Subdivisions and Severance applications; and
- Other approvals are required when proposed land uses do not conform with Official Plans and Zoning By-laws.

For more information contact:

City of Cornwall 360 Pitt Street

P.O. Box 877

Cornwall, Ontario, K6H 5T9 Phone: (613) 932-6252 Fax: (613) 930-7426

Website: http://www.city.cornwall.on.ca Email: planning@city.cornwall.on.ca

Department of Fisheries and Oceans

The Department of Fisheries and Oceans (DFO) is responsible for the management of fish habitat pursuant to the federal *Fisheries Act*. The Raisin Region Conservation Authority (RRCA) works in partnership with DFO to ensure protection of fish habitat. When reviewing your permit application under the Fill, Construction and Alteration to Waterways Regulation, RRCA staff will consider the effect your proposed work may have on fish habitat and provide advice on minimizing any negative impacts. Where impacts on fish or fish habitat cannot be mitigated, and a harmful alteration, disruption or destruction to fish habitat may occur, the RRCA is required to forward your file to DFO for consideration.

For more information contact:

Department of Fisheries and Oceans

Prescott District Office

401 King Street West

Prescott, Ontario, KOE 1TO

Phone: (613) 925-2865

Fax: (613) 925-2245

Email: referrals.prescott@dfo-mpo.gc.ca

Environment Canada

Under the *Department of Environment Act*, Environment Canada (EC) has general responsibility for environmental management and protection, and also has a mandate to advocate for the preservation and enhancement of the quality of the natural environment. EC has a regulatory interest in migratory birds, species at risk, toxics, and, water quality as administrators of the following federal legislation; the *Fisheries Act* (sub-section 36(3) prohibits the deposit of potentially deleterious substances into Canadian fisheries waters); the *Canadian Environmental Protection Act* (1999); the *Migratory Birds Convention Act*; and the *Species at Risk Act*.

Through the signing of the Canada-U.S. Water Quality Agreement and the amended 1987 Protocol, EC also plays a lead role in the commitment to restore Areas of Concern in the Great Lakes. The St. Lawrence River (Cornwall) AOC Remedial Action Plan and the subsequent development of the Cornwall Sediment Strategy are responsibilities under that Agreement.

A federal EA of a project proposal under the Canadian Environmental Assessment Act (CEAA) is generally required when federal departments or agencies take any action that would allow a project to proceed (e.g., by issuing permits, and/or by the provision of funding and/or federal lands). CEAA is administered by the Canadian Environmental Assessment Agency under direction of the federal Minister of Environment. Given EC's broad mandate with respect to environmental matters, the department is often requested to provide its expert scientific advice and knowledge to assist in the environmental assessment (EA) screening of projects or undertakings subject to the Canadian Environmental Assessment Act (CEAA).

For more information *contact*:

Head, Environmental Assessment Section Environmental Policy and Assessment Division Great Lakes and Corporate Affairs Branch Environment Canada, Ontario Region 867 Lakeshore Road, P.O. Box 5050

Burlington, Ontario L7R 4A6 Phone: (905) 336-4953 Fax: (905) 336-8901

Website: http://www.on.ec.gc.ca/epad/ Email: ea-ee.ontario@ec.gc.ca

Ontario Ministry of the Environment

The Ministry of the Environment (MOE) is responsible for protecting air, land and water quality to ensure healthy communities, ecological protection and sustainable development for present and future generations of Ontarians. In carrying out its mandate, the Ministry administers and enforces the Ontario Water Resources Act, Environmental Protection Act and the Environmental Assessment Act and all associated regulations. Under these Acts, the Ministry of the Environment reviews applications for new or modified water and sewage facilities and investigates which facilities may emit a contaminant, as well as, ensures the Ontario Environmental Assessment process is followed. Organizations subject to the Environmental Assessment Act are public bodies such as municipalities, provincial ministries and agencies and conservation authorities. In addition, private sector activities may become subject to the Act through designation by the Minister and Cabinet.

Under the *Ontario Water Resources Act* the Ministry of the Environment issues permits known as, "Permits to Take Water". These permits are required for the use of water from rivers, streams, lakes and groundwaters. In granting these permits the Ministry of the Environment ensures the water taking activity will not negatively effect the environment or the natural functions of a watercourse.

The Ministry also reviews and approves applications for new or modified water and sewage facilities. The review of these applications also takes into consideration environmental effects that may be related to the location and placement of intake and discharge structures associated with water and sewage facilities.

For more information contact:

Ministry of the Environment Cornwall Area Office

113 Amelia St.

Cornwall ON K6H 3P1

Toll free: (800) 860-2760

(within 613 area code)

Phone: (613) 933-7402 Fax: (613) 933-6402

Mohawk Council of Akwesasne

The Mohawk Council of Akwesasne (MCA) environmental assessment process requires proponents of development within Akwesasne to conduct a detailed environmental assessment of their activities on the natural environment and the community of Akwesasne.

For more information contact:

Mohawk Council of Akwesasne Government Office

P.O. Box 579

Cornwall Ontario

K6H 5T3

Phone: (613) 575-2348

Fax: (613) 575-2181

and

Mohawk Council of Akwesasne Department

of the Environment

Phone: (613) 936-1548 Fax: (613) 938-6760

What *legislation* will likely be considered in the review of my application

- The provincial *Conservation Authorities Act* and the Fill, Construction and Alteration to Waterways Regulations require the approval of the RRCA for any activities that may result in filling, the alteration of shorelines/rivers, or the construction of bridges/structures in the regulation area.
- The provincial Public Lands Act provides that no person shall dredge or fill shorelands or work on any Crown land without a work permit from the Ministry of Natural Resources.
- The provincial Lakes and Rivers Improvement Act provides that any work which may forward, hold back or divert water must receive prior approval from the Ministry of Natural Resources.
- The federal *Fisheries Act* provides that no person shall carry on any work that results in the harmful alteration, disruption or destruction of fish habitat. The Act also provides that no person shall deposit a deleterious substance of any type in water frequented by fish.
- The provincial Ontario Building Code Act provides for municipalities to require the issuance of a building permit for most buildings and structures and to conduct inspections for the construction work.
- The provincial *Planning Act* provides the ground rules for land use planning in Ontario and describes how land uses may be controlled, and who may control them.
- The provincial *Ontario Water Resources Act* provides the legislative framework for the approval of the collection, treatment and discharge of sewage. The Act also requires a Permit To Take Water (PTTW) be issued before any water takings, greater than 50,000 litres a day, are allowed.

Penalties and Enforcement – Failure to obtain the correct permits prior to placing fill, dredging, alteration to a waterway or the construction of buildings and structures could be a violation of one or more of the above noted Acts. Violations can result in extensive fines and you may also be required to restore and rehabilitate the disturbed area or remove the illegal structure.

What are some examples of *permits* I may need to *obtain*

The type of approval and permit may vary depending on the location and type of work proposed. You may be required to obtain a permit or approval from the following agencies. You are responsible to determine whether or not you are in one of the zones of contaminated sediments, as well as complete and circulate your application with all the correct information. Projects that involve harmful alteration, disruption or destruction of fish habitat may require a harmonized Environmental Assessment process involving Federal and Provincial agencies. If these projects come into contact with Cornwall Island (or Mohawk lands), then the undertaking may be subject to a harmonized EA process involving the Federal, Provincial and Mohawk agencies. Sediment remediation projects will require a harmonized EA process involving the Federal, Provincial and Mohawk agencies.

Type of Approvals	When Required	Agency	Legislation/Policy
Fill, Construction and Alteration to Waterway Permit	Filling, construction of bridges/structures, or altering shoreline within the regulated area	Raisin Region Conservation Authority	Fill, Construction and Alteration to Waterways Regulation
Work Permit or Approvals	Building or constructing, dredging, filling, or removal of aquatic vegetation on shorelands or on land under water	Ministry of Natural Resources	Public Lands Act Lakes and Rivers Improvement Act
Subdivision/ Severance Site Plan Approval Building Permit	Lot Creation, Development or Site Alteration on Land	City of Cornwall	Planning Act Official Plan Zoning By-law
Authorization for works or under-takings affecting fish habitat	Harmful alteration disruption or destruction of fish habitat	Department of Fisheries and Oceans	Fisheries Act
Permit to Take Water and Sewage Works	Water taking greater than 50,000 l/day Sewage Discharge includes storm water	Ministry of Environment	Ontario Water Resources Act

What information is needed to complete a *permit application*

Whether you are applying for a federal, provincial, or a conservation authority work permit, or a building permit from the City of Cornwall, there is basic information that you will be asked to provide concerning your proposed work. The project can be assessed more quickly when accurate and detailed information is provided. Always be sure to include the following information in your application(s):

- Your name, mailing address, municipal address, telephone and fax number, email address;
- A location plan showing your property, major roads, access roads, landmarks and the location of the proposed work;
- A detailed site map, survey plan or detailed sketch showing the location of the proposed work (e.g. buildings, structures, areas of dredge or fill) in relation to property lines and other important features, contaminated sediments and high water mark;
- A legible copy of your plans including a description of construction/work details such as timing, construction techniques, materials and dimensions of proposed fill or dredge areas;
- Provide rationale for the development or activity in its proposed location;
- Permission of adjacent property owners; and
- Describe any alternative designs (relocation, redesign, remediation considered).

Work permits may include conditions such as the time of year when your work can be done. Read your permit carefully.

If you cannot comply with all the conditions, you should not begin the work.

Before submitting your application – Have you answered the following?

- 1. Is additional supporting documentation required?
 - Remediation Plan or Engineers Report;
 - Description of potential impacts; and a
 - Description of mitigation measures
- 2. Have you applied the decision-making criteria?
- 3. Have you answered all the questions on every application?
- 4. Is an Environmental Assessment required?

Once you have completed all necessary applications, contact the RRCA before submitting the application(s) to the appropriate agencies.

After you have received your approvals and initiated construction of your project, contact the Ontario Ministry of the Environment directly if silt or sediment is released into the water. 1 800–268–6060

What types of activities require approvals

	ACTIVITIES
Construction of Private Shoreline Structures, or Public Works and Utilities	 Buildings and Structures – docks, walkways and boathouses Shorewalls, launch ramps, beaches Bridges, utility cables Activities on adjacent lands that affect stormwater runoff
Dredging or filling lands under water	 Filling/Covering Shoreline Protection Works, Rip Rap Dredging activities

How will I be *notified* of the decision on my *application* for development/ construction along the Cornwall waterfront

Each agency will review your application in accordance with their requirements and may meet with all parties to the Protocol to discuss your application. Each agency provides their decision to the RRCA.

The RRCA will contact you with a decision to approve, approve with conditions or deny your application. If your application is denied or you disagree with the conditions for approval you should contact the appropriate agency to consider your options in accordance with the provisions of the applicable legislation as noted in the decision.

Do you want more information

For more information on the Cornwall Sediment Strategy, Administrative Controls Protocol, please contact the Raisin Region Conservation Authority at (613) 938-3611 or check their website at http://www.rrca.on.ca/.

You, as the proponent of the application, are responsible to ensure that all applications are completed and approvals are granted before any work commences.

"Working in or near the three zones of Contaminated Sediments? - Call Before You Act"

Acronyms

AOC - Area of Concern

DFO - Department of Fisheries and Oceans

EA - Environmental Assessment

EC - Environment Canada

MCA - Mohawk Council of Akwesasne

MNR - Ministry of Natural Resources

MOE - Ministry of the Environment

PLA - Public Lands Act

PPS - Provincial Policy Statement

RAP - Remedial Action Plan

RRCA - Raisin Region Conservation Authority

Definitions

Activity – refers to construction, demolition, dredging, filling, piling, as well as any action that may cause alteration of water flow.

Adjacent Areas – those areas, contiguous to the zone, where it is likely that development or an activity may disturb or expose contaminated sediments located within the zone, through associated activities or altered flows.

AOC – (Great Lakes) Area of Concern (Great Lakes) – refers to geographic areas where human activities have caused or are likely to cause impairment of beneficial uses or the areas ability to support aquatic life. The St. Lawrence River AOC refers to the stretch of the St. Lawrence River between the Moses Saunders Power Dam and the Beauharnois Dam/Canal.

Covering – the act of protecting, confining, sheltering or concealing sediments by covering or enveloping them.

Cut and Fill Regulated Area – identified by Fill, Construction and Alteration to Waterways Regulation – those lands identified on a map located at the RRCA office and generally described as those lands along the St. Lawrence River south of Montreal Road/Water Street within City limits.

Development – the construction of buildings and structures requiring placement on the riverbed or adjacent areas.

Dredge – the physical alteration of the riverbed by the removal of mud, sand and other sediments through suction or scooping by machinery.

Filling – the physical alteration of the riverbed by covering the bottom with deposited soil, sediment, concrete, cribs or any other material or object.

Fish Habitat – the "spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Piling – the act of driving of a beam or post into the riverbed.

RAP – Remedial Action Plans – are plans developed and implemented for Great Lakes Areas of Concern according to the commitments laid out in Annex 2 of the Canada-US Great Lakes Water Quality Agreement (GLWQA) 1987 Protocol. Each plan includes: an identification of environmental problems, sources and causes of the problems, and the involvement of the public to establish community and stakeholder goals and objectives, recommended actions, implementation plans and monitoring strategies.

Redesign – the process of making a new design or plan for a specific project to prevent the disturbance, exposure or re-suspension of contaminated sediments.

Relocation – the process of selecting another location for a development or an activity to prevent the disturbance, exposure or re-suspension of contaminated sediments.

Remediation – the cleanup or use of other methods to remove or isolate contaminated sediments.

Remediation Plan – a document prepared by a qualified professional that indicates how to remove, handle and dispose of contaminated sediments in a safe and environmentally protective manner.

Re-suspension – the remixing of sediment particles and pollutants back into the water column.

Scouring – the moving or scraping of the top layer of the riverbed.

Shorelands - are defined by the *Public Lands Act* to mean Crown or private lands that are covered or seasonally inundated by the water of a lake, river, stream or pond.

Zones – There are three zones of contaminated sediments located along the Cornwall waterfront as shown on the map at the RRCA office.

