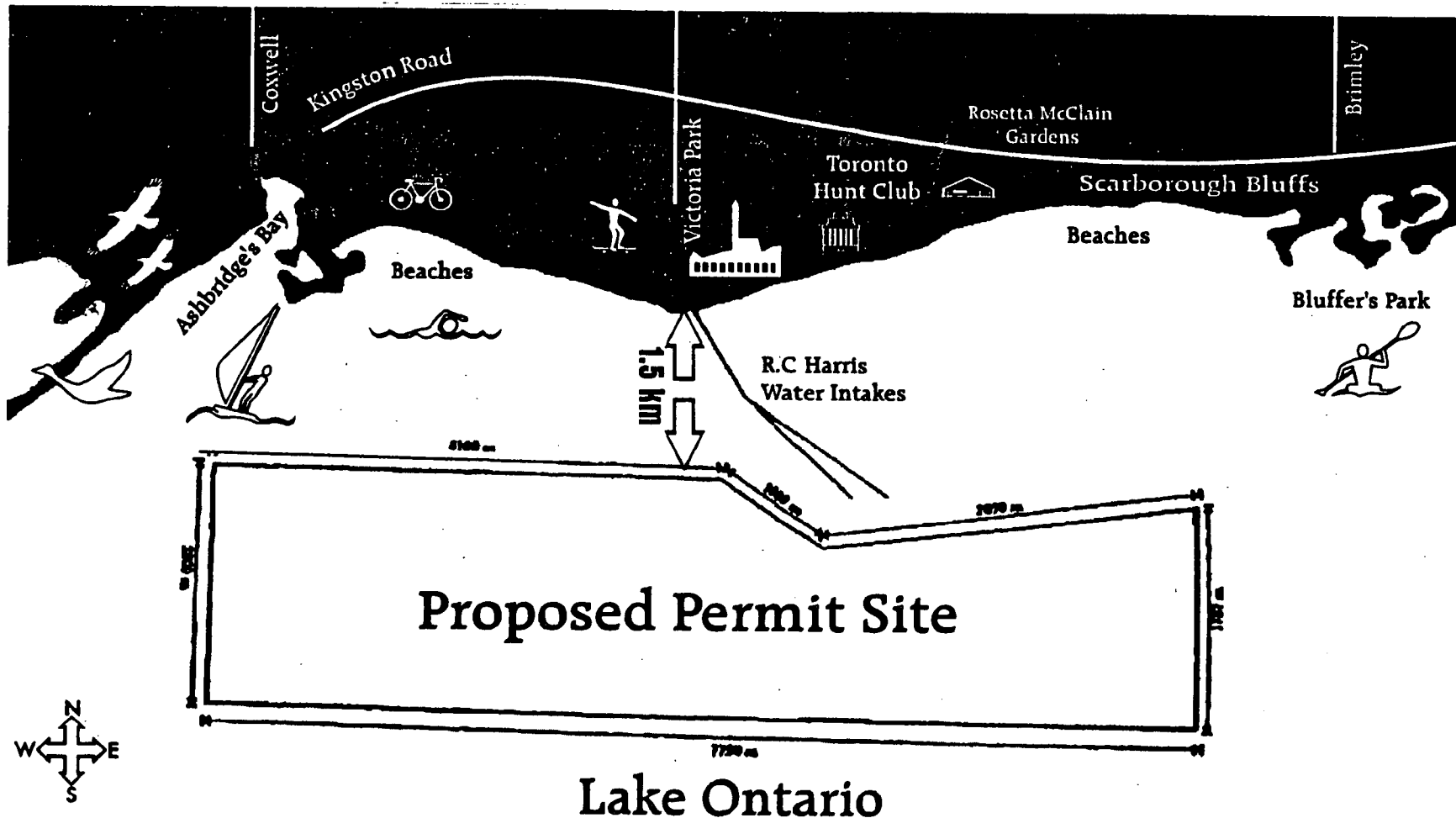


Beaches and Bluffs Mining Proposal



Bedrock Resources, Inc., a privately owned and operated aggregate supplier, is applying for permits to mine up to 54 million tonnes of Lake Ontario sand, 1.5 km offshore, from Ashbridges Bay to the Scarborough Bluffs (see map, above). Their 200 ft. long suction dredgers will be operating from 9 to 18 hours a day, 6 days a week, from April to September, for up to 100 years. We believe that this threatens to contaminate Metro's drinking water, speed up Bluffs and Beaches erosion, destroy fish habitat, and seriously affect the public enjoyment of all the beaches, parks, trails and boating complexes along this waterfront.

This factsheet was independently prepared by a coalition of community associations and concerned citizens.

Background

Bedrock applied to the Ontario Ministry of Natural Resources (MNR) in 1990. Since that time, its proposal has been reviewed and assessed by numerous provincial ministries, and metro and city departments. Despite this long history, neither the public nor any of the affected area's political representatives were informed of the proposal; it only reached public attention as a result of the investigative efforts of a local Beaches newspaper (Beach Metro Community News). As well, although Bedrock has conducted its *own* studies, no level of government has as yet initiated an environmental assessment of the project's impact. It is possible that, without public pressure, permits may be granted without such assessments being undertaken. Bedrock estimates that it will receive its permits and be ready to begin mining within *9 months to 2 years*.

Why This Site?

Almost all aggregate is mined from land quarries. According to Bedrock's studies, Metro's waterfront is one of at least three Lake Ontario sites where suction dredging can be used to successfully mine lake bottom aggregate. Bedrock wants to mine *this* site because it is located in the heart of Metro: "it's the largest market with the highest prices in all of Canada". Bedrock's profit margin will be higher here too, due to lower operating costs (*no trucking, and dockside processing*).

Are There Any Benefits to the Public?

The Government of Ontario will receive royalties of 50 cents a tonne. This will mean a yearly revenue of \$135,000, with a possible maximum of \$500,000 per year by the turn of the century. The public *costs* associated with this operation will outweigh this benefit so much, we find it hard to believe that our governments are still even *considering* this proposal.

Metro's Drinking Water

The proposed dredging area is located just off the R.C.Harris Filtration Plant, which supplies fresh water to 45% of Metropolitan Toronto (*including Toronto, Scarborough, Markham, York, North York, and Etobicoke, etc.*). The lake bottom holds a large number of toxins, many of which have been routinely discharged into the lake by both the Harris and Ashbridges Bay Plants, in amounts that exceed the Provincial Water Quality Guidelines. These include the heavy metals *aluminum, arsenic, mercury, cadmium, chromium, copper, iron, lead, nickel* and *zinc*, as well as organic compounds such as *Dieldrin, Lindane, trichlorobenzene, phenolics, dichloromethane* and *chloroform*. (Lindane, a pesticide, and Dieldrin are probable cancer-causing and/or mutagenic chemicals.) These toxins will be kicked up as the dredger passes by, forming part of an immense underwater cloud (*with an area of at least 160,000 m²*). Since the dredger will be passing within 400m of the Harris plant's intake valves (*see map*), this cloud - and the toxins within it - will most probably be taken in along with our drinking water. Metro Works, which operates the Harris Plant, has examined the mining proposal, and is seeking a permit requirement that would make Bedrock responsible for compensation should the Harris Plant be impacted by its operation. This confirms our belief that there are no guarantees that this project won't adversely affect Metro's health. Our demand that ALL Metro-area political representatives be fully informed of this proposal's contents, history, and pending future - so that their constituents can be informed of this danger - has so far been ignored.

Bluffs and Beaches Erosion

Bedrock's own studies claim that the dredging will have a minimal effect on the shoreline. However, man's previous efforts to change nature have often resulted in unpredicted and disastrous consequences. Here is an excerpt from a 1957 report on Scarborough Bluff erosion, moved by Scarborough Mayor A.M.Campbell, that cites sand dredging as having been the most important cause of that erosion:

"The most important factor affecting the erosion of the Scarborough Bluffs was the action of the giant sand suckers the "Cyclone" and the "Tornado" from 1910 to 1914. The sand suckers removed immense quantities of sand and clay east of the Eastern gap to enlarge Toronto Island, improve the Toronto Waterfront and to fill Ashbridge Bay. The resulting holes were quickly filled with sand and other materials from the [sand] bars offshore from the Bluffs. The lake currents moved the material from the bars to the east end of Toronto. The waves now break at the unprotected foot of the bluffs and the resulting erosion has removed vegetation increasing the problem."

Bedrock proposes to remove 277,000 tonnes of sand in its first year of operation, and increase that amount to a possible 1,000,000 tonnes per year within 5 years. Eventually the lake bottom will be lowered by 2 meters over the entire 14 square kilometer area. What will this do to the Scarborough Bluffs, the Eastern Beaches and even the Toronto Islands, which are still being changed by the winds, currents and the sand movements resulting from them? Even Bedrock's own studies at one point admit that *"it is impossible to accurately predict the impact of the proposed mine area on the shoreface profile"*.

The City of Scarborough has already invested millions of dollars in shoreline protection. Private real estate investment in the area is in the billions of dollars. We consider the risk that this proposal poses as being too great to be acceptable.

Fish Habitat

The proposed mining site (see map) plays an important part in the lake's fish life. Dredging will affect it in these ways:

1. Destruction of spawning habitat:

The site is a spawning habitat for a number of species, especially rainbow smelt. This habitat will be destroyed by the dredging itself. Rainbow smelt, which are already in rapid decline, are "crucial to the Lake Ontario ecosystem", being among the "most significant prey species" for salmon. A reduction in smelt means a reduction in salmon. As well, spawning habitats adjacent to the site will be endangered by the effects of toxins released by dredging.

2. Destruction of part of the lake's food chain:

The mining site is also home to a very large "benthic invertebrate community" (very small bottom dwelling organisms) that forms the beginning of the lake's food chain. Dredging will simply destroy large sections of it. This will mean a reduction in food available for many species, including chinook and coho salmon, rainbow trout, whitefish, alewife, and smelt. Here's what Bedrock's own report says about this:

- "benthic feeding fishes will not be able to feed in the swath dredged by the draghead for at least two months after dredging"
- "Changes in the structure of the benthic invertebrate community could lead to a reduction in the availability of prey of sufficient size for optimal growth of certain fish species"
- Regarding salmon & trout: "The impacts of dredging on benthic invertebrates and forage fish species may make the area less suitable for these fish species"

3. Threat to all life forms within the ecosystem:

The toxic underwater cloud kicked up by the dredger will endanger benthic invertebrates, fish eggs, fry, and any fish feeding off these. The Bedrock report says that "The turbidity plume [ie, the "underwater cloud"] which is generated may have sublethal effects to any fish which remained in its influence for a prolonged period." This conclusion is based on models of "turbidity plumes" generated by one dredger operating at one shift per day; it does not speculate on the effects of plumes generated by the number of dredgers and shifts that will be required to mine the amounts projected for the future.

4. Interference with a favourite sport fishing area (see map):

The mining area, which stretches from just east of Bluffer's Park to Ashbridges Bay and extends four kilometers from shore, overlaps an important salmon and trout fishing ground.

Public Enjoyment of Waterfront

The waterfront directly affected by this project includes Ashbridges Bay, the entire Eastern Beaches (including beaches east of the Harris Plant), the Scarborough Bluffs, the western edge of Bluffer's Park, and all the parks, trails, yachting, fishing, windsurfing and boating facilities included in this area. Our governments have invested billions of dollars in its preservation and cultivation, making it one of Metro Toronto's most beautiful and cherished recreation areas, and a tourist attraction that is internationally esteemed. If this mining project proceeds, its 200ft. long suction-dredgers will be operating just 1.5 kilometers offshore of this waterfront, for 9 to 18 hours a day, 6 days a week, April to September every year. Here's what it will do:

Water Pollution *Dredging will release all the toxins on the lake bottom (see Metro's Drinking Water, above). It will also remove millions of tonnes of lake bottom sand, thereby changing how the lake's ecosystem manages those toxins. It is quite possible that the danger posed by those toxins will dramatically increase with the removal of that sand. Dredging would therefore seriously endanger the health of all swimmers, windsurfers, canoeists, kayakers, and other waterfront users, and utterly negate the effect of all the money that has been spent in efforts to clean that water up.*

Noise Pollution *The proposed mining technique employs an enormous vacuum machine. The boat housing this machine must be kept in constant motion, by either onboard engines or tugs. The continuous, combined sound of vacuum and engines, on open water and just 1.5 kilometers from shore, will at best be a never-ending irritant that will have a very negative impact on the public enjoyment of this area. It will discourage tourism, lower the quality of life for all area residents, and have a negative effect on property values.*

Water Safety *This waterfront is a prime recreation area for sailors, windsurfers, canoeists, kayakers, surfers, and other water enthusiasts. Dredging will not only pollute this waterfront, it will also pose a significant safety hazard. This is the least appropriate place for an industrial site!*

Visual Pollution *The dredging vessel and the tugs required to drive it will become a permanent part of the waterfront landscape. It will literally cover the waterfront, just meters from shore, for anywhere from 9 to 18 hours a day, everyday, every year. It is hard to imagine that the money and efforts of generations of Ontarians were invested in this area just so that it might become a suitable frame for a picture such as this. The following quote from Bedrock's studies shows how insensitive this project is to what the area really is, and to what it means to those who use it:*

"As the essence of the waterfront is its function as a busy harbour, it seems unlikely that the presence of the dredge would be unduly noticeable."

What You Can Do

1. Inform your membership:

- *Post a copy of this factsheet*
- *Distribute some or all of this factsheet with your next newsletter*
- *Include this issue in your next meeting*

2. Contact us!

We are a coalition of community associations and concerned individuals opposed to this project. We'd like to hear from you! Please fax us, so that we can keep you informed. If you have a particular talent (or just time) that might help us in our opposition, please let us know.

Coalition Fax: 694-2970

3. Contact your area's politicians:

Ask your members to phone, fax or write your area's political representatives at city, metro, provincial and federal levels.

Ask these representatives:

- *Whether they had been informed of this proposal*
- *What they know about it*
- *Where they stand on it*
- *What actions they have begun to try and stop it*

Ask your political representatives to insist on being fully informed, and to then inform your community!

4. Phone these Ontario Ministries:

Jim Barker, Ontario Ministry of Natural Resources (MNR) District Manager, is the administrator who will ultimately decide whether or not this project should go ahead. Greg Jones is the MNR Inspector responsible for this proposal. Howard Hampton is their Minister. The other ministries listed will be contributing to the decision. Ask your members to contact these ministries, and demand that this proposal be permanently withdrawn from consideration.

Ministry of Natural Resources: *Jim Barker: 905-832-7222; Greg Jones: 905-832-7215; Hon. Howard Hampton: 416-314-2301*

Ministry of the Environment: *Hon. Bud Wildman: (416) 323-4360*

Ministry of Health: *Hon. Ruth Grier: (416) 327-4300*

5. Raise this issue at all-candidates meetings:

The political landscape may change on June 8. We can prepare for change by addressing provincial candidates NOW.

6. Plan to attend our public meetings:

Our coalition will be organizing a number of public meetings. Other projects impacting the waterfront, such as the Ashbridges Bay Sewage Treatment Plant expansion and the future of the island airport will also be addressed. The presence of your association's membership will help ensure that all our concerns are heard. Please contact us for further information!