



Save Georgian Bay

is a grassroots organization committed to stopping TC Energy's pumped storage energy proposal which will cause irreparable harm to the Escarpment and pose significant risks to the ecosystem and waters of Georgian Bay.



TC ENERGY'S PUMPED STORAGE PROPOSAL: WHY TAKE THE RISK?
JULY 2025



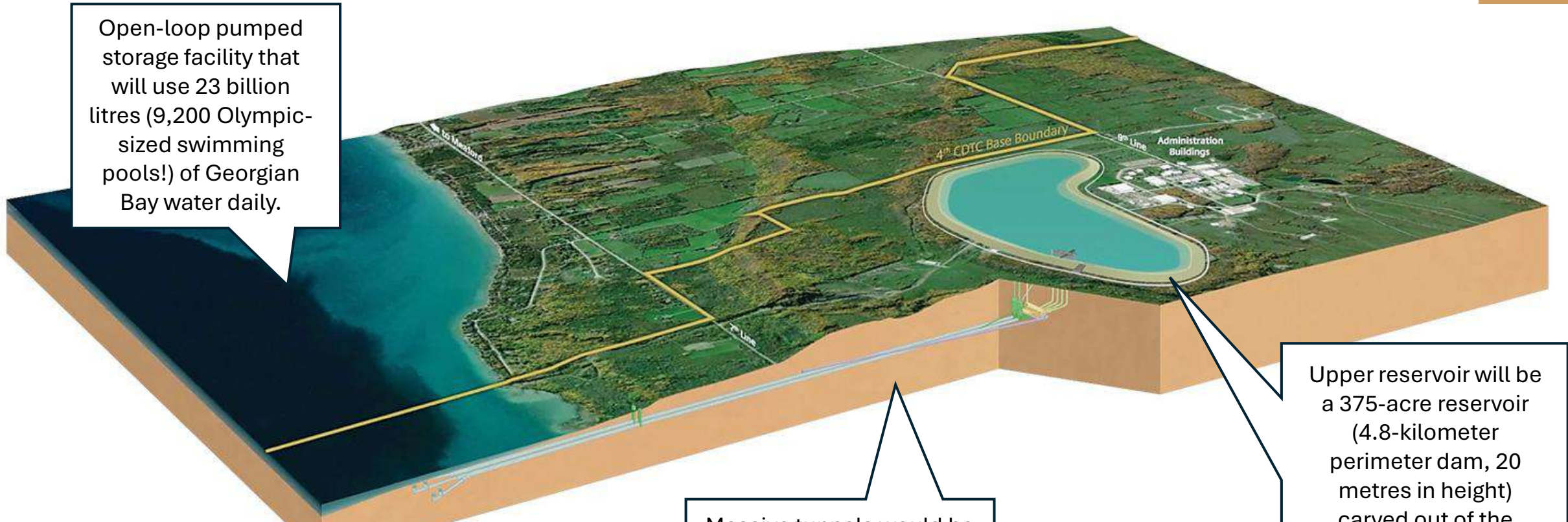
Save Georgian Bay: The Time is Now



- A hydroelectric energy storage system that is used to balance the electrical supply and to support the transition from gas plants to wind, solar, and nuclear energy production.
- **Pumped storage facilities do NOT generate any new electricity.**
- Open-loop pumped storage works by moving water between a lower **open body of water** and an upper reservoir constructed at a higher elevation.
- It “charges” at night, when energy demand is lower, by using power from the grid to pump water to the upper reservoir. Then, during the day when that power is needed, the water is released back down into the open body of water, turning turbines and generating electricity along the way.
- Open-loop pumped storage is less efficient, more expensive, and more environmentally damaging than other energy storage options. It takes longer to build and lacks the scalability and site flexibility of modern alternatives.



WHAT IS OPEN-LOOP PUMPED STORAGE?



Open-loop pumped storage facility that will use 23 billion litres (9,200 Olympic-sized swimming pools!) of Georgian Bay water daily.

50 kilometres of high-voltage underwater cables stretching to Wasaga Beach would connect to the grid. *(Not shown)*

Massive tunnels would be excavated deep into the Niagara Escarpment and beneath Georgian Bay.

Upper reservoir will be a 375-acre reservoir (4.8-kilometer perimeter dam, 20 metres in height) carved out of the portion of the Escarpment that is an active, contaminated military training base.



TC ENERGY'S PROPOSAL

| | The Pitch | The Truth |
|---|--|--|
| Energy Production vs. Energy Storage | Provides flexible clean energy to Ontario's electricity system | <ul style="list-style-type: none"> • It doesn't produce energy — it stores it. • It uses 30% more energy to operate than it would deliver back to the grid <i>(while alternative energy storage technologies can offer up to 90% efficiency).</i> |
| Climate Change | Marketed as a climate change solution | <ul style="list-style-type: none"> • <u>All</u> energy storage technology help climate goals — alternative energy storage projects would also support climate change. • Construction would <u>add</u> ~500,000 tonnes of CO₂ to the atmosphere. |
| Economic Benefits | \$6.8 economic impact | <ul style="list-style-type: none"> • Publicly funded “cost plus” model = no net benefit. • Rejected at least twice by the IESO (due to insufficient value to electricity consumers). |
| Jobs | 41,200 jobs | <ul style="list-style-type: none"> • Calculated in “people-years.” • Actually amounts to only about 800 temporary jobs. • TCE admits the project will only create about 32 permanent jobs. |



TC ENERGY'S PUMPED STORAGE PROJECT: THE PITCH VS. THE TRUTH

COSTS TO TAX PAYERS AND ENERGY CONSUMERS

- \$7B project using a “cost-plus” model – *including guaranteed rates to buy and sell electricity* – puts the economic burden on taxpayers and energy consumers.
 - The Ford government has already committed \$285 million to cover TC Energy’s project pre-development costs - *This is after TC Energy committed that the project costs would not fall to tax-payers!*
 - Project was rejected at least twice by the Independent Electricity Systems Operator (IESO) due to insufficient value to electricity consumers.
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DRINKING WATER CONTAMINATION

- Site disturbance could release contamination, risking drinking water quality for communities all around the Bay.
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HABITAT DESTRUCTION AND RISKS TO GEORGIAN BAY’S AQUATIC ECOSYSTEM

- Destroys 500 acres of habitat on the Escarpment, home to 36+ species at risk.
 - Open-loop system threatens Georgian Bay’s water quality, fish, and aquatic ecosystems.
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RISK OF DAM FAILURE

- A 325-acre reservoir holding 23 billion litres of water would be located above 300+ homes, cottages, farms and businesses.
 - In 2005, a similar reservoir failed at Taum Sauk pumped storage project in Missouri, USA.
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LONG DEVELOPMENT AND CONSTRUCTION TIMELINE

- Alternative energy storage technologies could be delivered in half the time.
 - The dynamics of the grid are changing dramatically, which may make the project obsolete by the time the 10-year development and construction is complete.
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LACK OF EFFICIENCY

- Pumped storage is only 70% efficient, while alternative technologies can reach up to 90%+, making better use of our in-demand energy resources.
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KEY CONCERNS WITH TC ENERGY'S PUMPED STORAGE PROJECT



- TC Energy has apparently agreed to cap costs to \$7b, while experts warn the costs are likely to climb to over \$10b by project completion. **That is \$1,700 to \$2,400 per Ontario family!**
- **The Ford government has already committed \$285 million** to cover TC Energy's project pre-development costs.
- *This is after TC Energy committed that the project costs would not fall to taxpayers!*
- TC Energy is seeking a “cost-plus” contract from the Ontario government, including guaranteed rates to buy and sell energy, **ensuring themselves a handsome operating profit funded by Ontario's energy consumers.**
- **The proposal was rejected at least twice by the IESO** (due to insufficient value to energy consumers).
- **Open-loop pumped storage is the most expensive storage option;** Battery storage – a technology favoured by the IESO – would be approximately half the cost for the same capacity and duration.



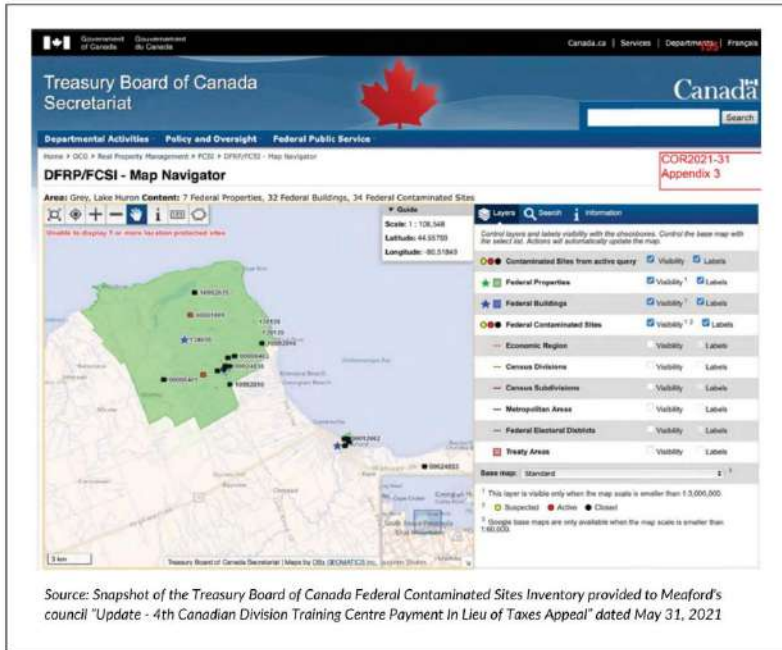
**EXTRAORDINARY COSTS TO ONTARIO
TAXPAYERS AND ENERGY CONSUMERS**



Meaford - *and many other communities around Georgian Bay* –
rely on the bay for a clean drinking water supply.

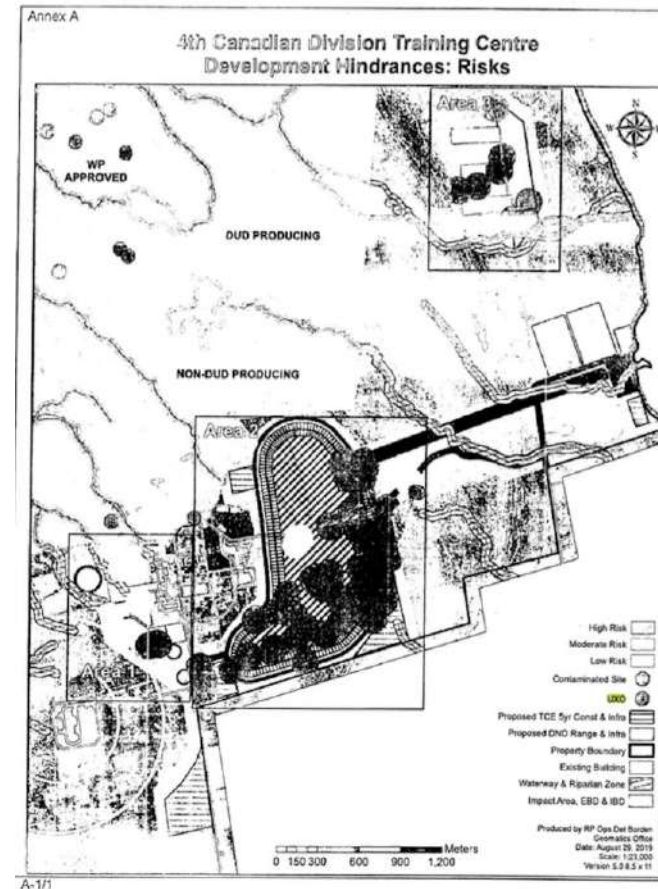


SAFE DRINKING WATER
IS ON THE LINE



“Regarding the existence of Unexploded Explosive Ordnance (UXOs) at the site, it is very difficult to provide a tally and type of ammunition that may be on 4 CDTC. I understand that 4 CDTC has been used for military live-fire training since the Second World War. **It is reasonable to expect that the types of ammunition that could be found at 4 CDTC include any ammunition that has been used by the CAF during that period.**”

Excerpt from May 9, 2024 letter from National Defence Corporate Secretary



A-1/1

Source: Department of National Defence documents obtained via an Access to Information request.

“Over the years the impact area has been heavily used for various types of fires. The expended rounds have caused various types of contamination from heavy metals to other toxins. Disturbing the soil would expose more of these elements to the surrounding area (air, land and water) and if the soil were used as part of the reservoir walls, then **the heavy metals and toxins could cause increased contamination of the water. Pollution of the water creates large concerns for marine animals’ health and for any person drawing water from the bay for personal use.**”



RISK OF SPREADING CONTAMINATION



HABITAT DESTRUCTION

- TC Energy's proposed pumped storage project would cause **unavoidable and irreversible destruction of 500 acres of the Escarpment.**
- The military base portion of the Escarpment is home to **36+ Species At Risk, 9 of which are Endangered!**



RISKS TO THE AQUATIC ECOSYSTEM

- **Intake and outflow of massive amounts of water could cause turbid**, impacting the health of Georgian Bay's aquatic ecosystem.
- Similar projects have caused significant fish kill from entrainment and impingement, risking the devastation of Georgian Bay's fish population.
 - In 2025, similar intakes at Bruce Power's nuclear plant killed millions of fish.
 - It took a 12-year lawsuit to stop the Ludington pumped storage project from killing 150 million fish per year! They still kill many fish that get through the nets they installed.
- **Chief Greg Nadjiwon admits the project will kill fish** — but TC Energy hasn't disclosed how many. How many is too many?

- **What happened?**

A catastrophic failure of the Taum Sauk upper reservoir dam in the Ozarks of southeastern Missouri on December 14, 2005. Failure was caused by overtopping, faulty gauges, and lack of spillway.

- **Why?**

Human and engineering failures: bad instrumentation, operational negligence, and design shortcomings.

- **Result?**

Over \$1 billion in environmental and property damage. Fortunately, no deaths because this was built away from populated areas.

- **Accountability?**

Hefty fines and settlements totaling ~\$200M+.



“The Wild Story of the Taum Sauk Dam Failure”
by *Practical Engineering*



Click on the image to watch a video about the catastrophic dam failure at the Taum Sauk pumped-storage plant.



Alternative energy storage technologies can be delivered **twice as fast, at half the cost, and with far greater efficiency.**



QUEBEC'S RESERVES

- Hydro Quebec's storage capacity is 1.6x greater than Ontario's total annual electricity consumption. To increase our access to Quebec's reservoirs we must expand east-west electricity transmission grid. The IESO has identified that we can increase east-west grid by 7,500 MW.
- **According to the IESO, the cost of expanding east-west grid is up to \$1,400 per kW, which is 67-80% lower than the cost of TC Energy's proposal!**



BATTERIES

- In 2023 and 2024 Ontario has procured 2,916 MW of stationary battery storage capacity from 26 facilities, demonstrating EISO support for this technology.
- **Batteries are 90%+ efficient and approximately 50% less expensive than TC Energy's pumped storage proposal.**
- **These "On the grid" options are better than running a 50km line on the bottom of Georgian Bay from Meaford to Wasaga Beach.**
- While there has been some criticism Lithium Iron batteries, there are several other battery technologies available: Lithium-iron Phosphate (LFP), Sodium-Ion, and Redox Flow Batteries to name just a few.



THERE ARE SMARTER OPTIONS!



“According to the National Energy Board, 17 of the 39 major pipeline accidents in Canada from 1992 to 2014 were on pipelines owned by TransCanada or its subsidiary NGTL.”

Source: *The Polaris Institute Profile of TransCanada Energy*

Some headlines:

- “TC Energy's Coastal GasLink pipeline fined for environmental non-compliance”
- “Gas Compressor Expansion Threatens Public Health and Water Quality in Petersburg, Virginia”
- “Massive oil spill distorts Kansas couple’s confidence in the integrity of Keystone pipeline”
- “TC Energy pipeline rupture sparks wildfire near Edson, Alta.”

- Leaked recordings reveal **TC Energy’s tactics to influence government, media, and public opinion**, including *bragging about their success using these tactics in Meaford!*
- **Although TC Energy initially claimed taxpayers wouldn’t foot the bill, they are now seeking public funding for the project. The Ford government has already pledged \$285 million to cover TC Energy’s pre-development costs.**
- Despite claims of collaboration, project details remain hard to access. Because **the proposal was submitted as an unsolicited bid**, it bypassed Ontario’s standard public procurement process — raising serious concerns about transparency and fairness.

“TC Energy’s proposed pumped storage operation is a monster of an idea. It could destroy the entire aquatic ecosystem of Georgian Bay and threaten the sanctity of a UNESCO World Biosphere. *It must be stopped!*”

- Maude Barlow

Co-founder of the Council of Canadians and the Blue Planet Project; Chair of the Washington-based Food and Water Watch; author of 20 books including *Blue Gold, Whose Water Is It Anyway?* and *Still Hopeful: Lessons from a Lifetime of Activism*



ESCARPMENT
CORRIDOR
ALLIANCE



Save Georgian Bay,
Winner Corporate Award for
Conservation 2024



FRIENDS OF SAVE
GEORGIAN BAY




Thank you to the 5 municipalities that have made resolutions against the project. You can read their resolutions on the Save Georgian Bay website.

“I want to understand how it **impacts our military and our base**, because that’s the key.”

“If they want to go ahead with this project ... **they should be doing it on their own and they shouldn’t be dependent upon public money.**”

“I’ve been neutral, but ... **the cons that I’ve heard around this project outweigh the pros** for why it should go forward, so I’m still very pessimistic about the benefits of moving ahead with this proposal.”

- Alex Ruff
Conservative MP
Bruce-Grey-Owen Sound



“For me a significant concern and uncertainty is the **final price tag** of this project because it is proposed to be funded from the electricity rate base **and not through a competitive price-based procurement.**”

- Ted Hsu
Liberal MPP
Kingston and the Islands



“Residents made it clear to us that this project **makes zero financial or environmental sense** – which is why the Ontario government’s own electricity regulator has repeatedly vetoed it. And yet the Progressive Conservatives continue to push this project forward, **putting private interests before everyday people.**”

- Mike Schreiner
Ontario Green Party
Leader




Click on the quote to watch Mike Schreiner speak on the project.



POLITICAL OPPOSITION TO THE PROJECT



For more information visit
savegeorgianbay.ca