### What Else Can You Do Scan QR to Start Making Changes



#### Take Action: Stop Microplastic Pollution!

Microplastics are in the Great Lakes threatening the health of our aquatic ecosystems and even our brains. A 2024 study found dementia patients had up to 10 times more microplastics in their brains than in those without the disease. The Great Lakes need a real plan to monitor and reduce this pollution.

#### Take Action: Report Plastic Pollution – Fast & Easy!

See plastic pollution? Take a photo, tag the location, and submit it through an easy-to-use app. Your report helps Georgian Bay Forever clean up and alert the right people.

**Take Action: Stop Microfibres** from Your Laundry Getting into Georgian Bay!

Your washing machine sheds plastic in fibre form into the water—one of the most significant sources of microplastic pollution. A filter can capture up to 89% before they reach our lakes and rivers.

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Georgian Bay Forever conserves, protects, and restores the aquatic ecosystem of all Georgian Bay. For more information, visit georgianbayforever.org



The **Georgian Bay Association** works with our water-based member communities and other stakeholders to ensure the careful stewardship of the greater Georgian Bay environment.

Learn more at georgianbay.ca





# Better Dock Materials for a Cleaner Georgian Bay

Unencapsulated foam used in floating docks is polluting Georgian Bay—littering shorelines with plastic pieces that eventually break down into harmful microplastics threatening wildlife and fragile ecosystems. Fortunately, safer alternatives exist, and together, we can take action to protect the Bay for future generations.

GEORGIAN BAY



## GEORGIAN BAY

## Why Should You Care

Unencapsulated dock foam is made from polystyrene, a type of plastic commonly used to float docks. Unlike encapsulated foam which is protected by a durable plastic shell unencapsulated foam is exposed to the elements, making it highly susceptible to breaking apart over time due to UV rays, ice movement, and wave action.

#### **Problematic Environmental Impacts**

- Shoreline Pollution: Large amounts of foam fragments wash up along the shoreline and are nearly impossible to clean up. Over time, they degrade into microplastics smaller than 5 mm—but never go away.
- Harm to Wildlife: Birds, fish, and aquatic species can ingest foam fragments and microplastics as food, affecting their growth, survival, reproduction, feeding and swimming.
- Chemical Leaching: As foam breaks down, it can release harmful chemicals into the water, adding to pollution and threatening sensitive ecosystems.





# We Can Stop This

**Bill 228** came into effect in May 2023, prohibiting the use of unencapsulated polystyrene in new floating docks, platforms, and buoys. It's an important step—but awareness remains low, and the law **only** applies to future purchases.

### Better Alternatives for Dock Floatation

No dock is entirely free of environmental impact, but if you own a dock with unencapsulated foam, now is the time to upgrade to a more sustainable option. Every property is different, and dock solutions must account for site-specific conditions and local regulations.

While the final decision is up to each dock owner—and your own research will be necessary—we've identified several safer alternatives worth considering. These options may come at a higher upfront cost, but the long-term environmental benefits and potential savings make them a wise investment.

### **Alternative Considerations**

### Modular Cubes or **Dock End Floats** (HDPE/Hard Plastics)

These docks are made from highdensity polyethylene (HDPE) in modular cube types or rectangle floats. They may be air-filled or foam-filled with closed-cell polystyrene or polyethylene foam encapsulated inside.

#### Benefits:

- C Long lifespan: estimated 20−50 years
- **C** Easy to assemble, expand, and store
- C Modular design: e.g. individual cube size ~36.5 x 48.5 x 48.5 cm
- Multiple colour options
- Solid foam-filled versions offer more stability and extended warranties
- Some allow wood planking or aluminum framing for a traditional look
- Some models use recycled plastic

## **Steel Pontoon Docks**

Steel pontoons coated with epoxy to prevent rust, which usually feature wood planking on top.

#### **Benefits**:

- Verv durable and stable
- Traditional look with wooden decking
- Sot modular better for larger, permanent docks
- Epoxy coating can be applied to help prevent corrosion



#### Modular Dock Type - Air Filled

#### **Concerns:**

- Potential leaching from plastic over time (likely minimal)
- Foam-filled types are heavier
- May undulate with wave action larger modules help offset this
- Avoid types filled with loose foam beads, which may break apart and cause pollution

### Pontoon-Based **Docks** (HDPE/Hard Plastics)

These docks use solid plastic pontoons for flotation and are often topped with wood decking for a classic look.

#### Benefits:

- Strong and stable (less modular)
- C Long-lasting: estimated 30−50+ years
- Traditional appearance with wood top
- Some manufacturers use recycled plastics

# **DIY Barrel Docks**

Do-it-yourself docks made using heavyduty plastic barrels as floats.

#### Benefits:

- Contract Contract Solution
- Potential to repurpose used barrels



Courtesy of NyDock (nydock.com)

#### **Concerns:**

- Plastic may leach into the water over time (likely minimal)
- Avoid thin pontoons filled with foam, could break
- Wood tops may degrade faster than the pontoons themselves



Courtesy of BlueBarrel Rainwater Catchment Systems (bluebarrelsystems.com)

#### Concerns:

- **C** May be less stable than other types
- Unsecured barrels may detach causing pollution. Fasten well.
- **3** Barrels may leach plastic over time
- Used barrels must be cleaned thoroughly before use

### Together, We Can Eliminate Dock Foam Pollution

Thank you for choosing safer materials for your floating dock your actions help protect the waters and shorelines of Georgian Bay.

We're also compiling a list of local suppliers who offer safer dock solutions like these. We'd love to hear from you if you have recommendations, ideas, or questions about safer dock materials. Please reach out to us at gba@georgianbay.ca

# **Final Step in Planning**

#### Don't Let Your Old Dock Harm the Bay

Disposing of a dock can be challenging due to its size, and each municipality handles dock waste a little differently. We've compiled their responses at georgianbay.ca/dockdisposal, but we recommend contacting your local municipality directly to confirm the best process. With some preparation, you can ensure your dock is disposed of responsibly and with minimal environment impact.

- C Township of the Archipelago email LVoortman@thearchipelago.ca. (705) 746-4243 ext. 341
- **C** Township of Carling (705) 342-5856
- C Township of Georgian Bay (District of Muskoka) waste@muskoka.on.ca or call (705) 645-2100
- C Municipality of Killarney (Sudbury District) (705) 287-2424 or inquiries@municipalityofkillarney.ca
- C The Municipality of McDougall (705) 342-5252 or info@mcdougall.ca
- C Town of Northeastern Manitoulin and the Islands (Manitoulin District) - (705) 368-3500
- C Town of Parry Sound (District of Parry Sound) (705) 746-2101
- **C** Seguin Township (705) 732-4300
- **2** Tiny Township (705) 526-4204

#### Can You Recycle **Unencapsulated Dock Foam?**

Unfortunately, no. Our research shows that unencapsulated dock foam is typically too degraded and contaminated to be recycled effectively.



Contact your local municipality to learn where and how to dispose of your old dock in accordance with local waste guidelines.



#### Concerns:

- Epoxy is plastic-based and may flake into the water (likely minimal)
- Epoxy may need replacement over time to prevent rust