

COASTAL WETLANDS

A wetland is an area permanently or seasonally covered by shallow water, or where the water table is near the soil's surface, allowing the growth of hydrophytic (water tolerant) vegetation. Lake Huron's coastal wetlands exist within 2-km of the lakeshore and are either marsh, swamp, bog or fen, formed in open or protected bays along the shore, or inland in low-lying areas. Diverse wetland types support different unique species of plants and animals. The warm, shallow, food-rich waters of coastal wetlands are habitat for many species, some of which are endangered and threatened plants, birds, reptiles, amphibians, and fish. The southeastern shores of Lake Huron (from Sarnia to Tobermory) is 30% coastal wetlands. Wetlands improve water quality, reduce flooding inland during high lake levels, and provide habitat for at least 66% of Great Lakes fish to use as spawning and feeding grounds. Over two-thirds of the original wetlands in the lower Great Lakes basin have been lost, making those remaining very important.

ECOLOGICAL SERVICES PROVIDED BY COASTAL WETLANDS:

- Are buffer zones, reducing flooding inland.
- Filter pollutants and nutrients entering the lake from inland sources.
- Reduce erosion by trapping sediment.
- Recharge groundwater by slowing down water entering the lake.
- Store carbon in the soil and vegetation.
- Provide recreation opportunities for bird watching, kayaking, and hiking.
- Habitat for rare and niche species of plant and animal.

STRESSORS AND THREATS AFFECTING ECOSYSTEM HEALTH:

- Invasive species (e.g. *Phragmites australis*, Red-eared Slider).
- Vehicular use (e.g. ATV's) compacting sensitive soil, potentially hitting slow-moving reptiles, and potentially introducing invasive species.
- Development such as shoreline hardening structures and residential development reduces habitat area and compromises ecosystem health.
- Native vegetation removal could reduce habitat needed for different animal lifecycles.
- Plastic pollution and garbage litter cause risks of entanglement and ingestion for animal species.
- Nutrients and pathogens from nearby septic systems, roadways, and developments can toxify wetlands through bioaccumulation, causing toxic environments for wildlife.



WHAT CAN YOU DO?

- Stay on boardwalks and designated pathways to reduce compaction and damage to the habitat.
- Habitat clean-ups remove garbage and litter which can pose a threat of entanglement or ingestion to wildlife.
- Do not use vehicles in or near coastal wetlands, as they may introduce invasives, crush vegetation, and potentially hit or injure wildlife.
- Remove invasive species from coastal wetlands, including *Phragmites australis*, Spotted Knapweed and others. Learn to identify these invasive species.
- If you see wildlife near coastal wetlands crossing roads (such as turtles), help them cross safely where possible.

FUN FACTS

90% of Great Lakes coastal wetlands are marshes.

Southern Ontario has lost over 72% of its wetlands from pre-settlement to 2002, and loses another 0.6% every 10 years.

7 out of Ontario's 8 turtle species are species at risk!
These species rely on coastal wetlands.

OTHER RESOURCES:

The Lake Huron Centre for Coastal Conservation

www.lakehuron.ca

Social @coastalcentre

Fact sheets produced as part of the Coastal Action Plan for the Southeastern Shores of Lake Huron

Funded Generously by the Ontario Trillium Foundation



The Lake Huron Centre for Coastal Conservation

GIVE AND TAKE:

Invasive species can completely dominate sensitive coastal wetland areas. Catching and treating invasive species such as *Phragmites australis* early is very important, as removal can be costly if the invasive is permitted to spread. Planting and restoring wetland areas with native species will help rejuvenate wetland areas to allow them to provide all their ecosystem services.

PROTECT ME, PROTECT YOU:

Coastal wetlands naturally armour the shore against erosion. Coastal wetland flood protection services are more effective than any human-made alternative!

DRIVING YOU CRAZY:

Motorized vehicles and ATV's can introduce invasive species, injure or kill wildlife, and disturb sensitive soils.

NO PLACE FOR WASTE:

Garbage and plastic pollution leach toxins and chemicals into coastal wetlands and nearshore waters, posing a risk of entanglement and ingestion for animals.

