

# RIVER MOUTHS

A river mouth is the connection where a large river enters Lake Huron. River mouths provide sediment, vegetation refuse, and fresh water from inland sources into nearshore waters. River mouths provide habitat for aquatic and terrestrial species that become reliant on the inter-connectedness for breeding, feeding, and nesting. Although areas of high turnover and change, river mouths on Lake Huron have historically attracted settlers, building vibrant communities still present today, like Grand Bend, Kincardine, Goderich, and Southampton. Lake Huron river mouth ecosystems have long-supported the creation and sustenance of communities because of their importance as marine harbours, sources of water, food and navigation, the provision of fish and wildlife, water quality protection, flood control, and other economic benefits.

## ECOLOGICAL SERVICES PROVIDED BY RIVER MOUTHS:

- Feeding and breeding area for many fish, reptile, and amphibian species.
- Source of inland water feeding the lake.
- River mouth banks naturally mitigate flooding impacts further inland.

## STRESSORS AND THREATS AFFECTING ECOSYSTEM HEALTH:

- River mouths receive the highest rate of human-induced stress, due to the built-up urban areas that surround them,
- Nutrients and pathogens from nearby septic systems, roadways, and developments toxify water within river mouths through bioaccumulation,
- Habitat destruction through shoreline hardening, marinas, harbours, and development,
- Artificial light pollution from nearby developments changes the predator/ prey structure of the food web in this area.
- Dredging of river mouths for navigation purposes severely disrupts sediment, clouding water, and initiates erosion during heavy storm events.



## WHAT CAN YOU DO?

- 💧 Re-naturalize river mouths by removing hardened structures where possible.
- 💧 Plant native vegetation along the banks of river mouths to stabilize slopes and deter geese from feeding on non-native grasses.
- 💧 Habitat clean-ups will ensure garbage is removed which can pose an entanglement or ingestion threat to wildlife.
- 💧 Remove invasive species from river mouths including *Phragmites australis* to prevent further transmission.

### FUN FACTS

31 large river mouths have been identified between Sarnia and Tobermory.

Some Species at Risk including Queen Snake can only survive in river mouth's or adjacent habitats as they have a niche feeding source, a single species of crayfish.

The current, or flow rate of rivers are usually fastest at the river's source, and slowest at the river mouth.

## OTHER RESOURCES:

The Lake Huron Centre for Coastal Conservation

[www.lakehuron.ca](http://www.lakehuron.ca)

Social @coastalcentre

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The Lake Huron Centre for Coastal Conservation

## MEANDER HERE AND THERE:

Re-naturalizing river mouths by removing hardened structures from the banks will allow natural pool and riffle patterns at the base of the river, encouraging spawning grounds for fish.

## CLEAN UP THE STREAM:

Doing semi-annual clean-ups of river mouths will clear the area of garbage and waste, which pose a threat to the health and safety of humans and animals. Especially important is removing fishing line and large items that often gather in river mouth areas.

## WHICH ONE DOESN'T BELONG:

Invasive species can completely dominate river mouths. Monitoring for invasive species, and treating any introductions early is very important, as removal can be very costly if the invasive is permitted to spread.

## ALL TOGETHER NOW!

Keeping river mouths connected to upstream creeks using vegetated corridors and buffers from the river bank will ensure habitat for plant and animal species residing here. 75% of each stream should have vegetative cover to help maintain good water quality entering Lake Huron from rivers.

