

GETTING THE FACTS ON

# Bruce Power and Fish in Lake Huron



Innovation at work

FOR MORE INFORMATION ON OUR LICENCE RENEWAL, PLEASE VISIT [www.brucepower.com/licencerenewal2018](http://www.brucepower.com/licencerenewal2018) OR [www.brucepower.com/factsheets](http://www.brucepower.com/factsheets). FOR QUESTIONS [info@brucepower.com](mailto:info@brucepower.com).

## Bruce Power uses cold, deep Lake Huron water in a once-through-cooling system to condense the steam and supply operational needs.

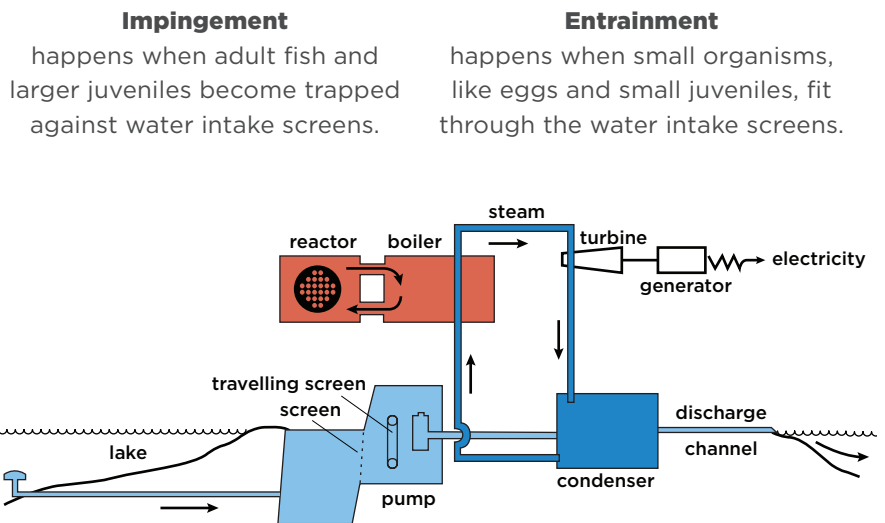
**99.9% of water used by the stations is immediately returned to Lake Huron.**

Fish habitat isn't damaged, but some fish are drawn into the cooling system. Based on our monitoring, these losses are small.



Outfall water **doesn't displace fish eggs and larvae** away from critical habitat – this has been studied by Ontario Hydro and Bruce Power

A thermal risk assessment using years of data concluded that thermal effluents had **minimal impact on fish.**



2,393 kg of all fish (age-1 equivalent) are impinged and entrained each year. This is equal to a typical day's catch for three commercial fishing vessels on the Great Lakes.



Lake Huron fish is safe to consume. Bruce Power samples for radiological contamination every year.

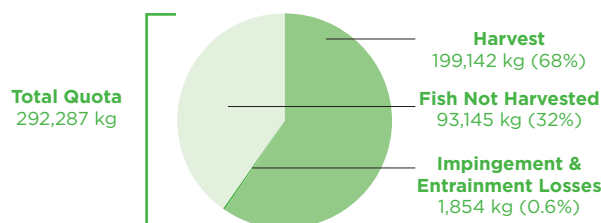


Bruce Power funds university research. Genetic testing found local lake whitefish aren't genetically distinct. Lake whitefish use the entire Lake Huron basin.

## Monitoring Fish Losses

- **Bruce Power carefully tracks fish losses** and shares data with the public, local Indigenous groups and regulatory agencies in the annual Environmental Monitoring Report.
- More than 40 years of monitoring.

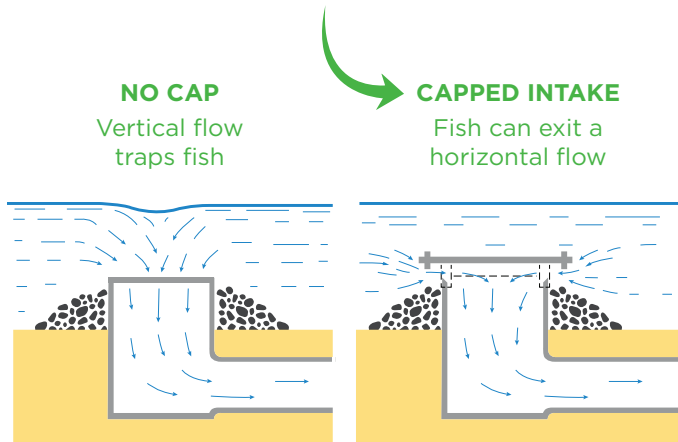
FISHERIES MANAGEMENT ZONE 1  
COMMERCIAL FISHING (annual log)



Impingement and entrainment losses of commercial fish are 0.6% of the zone's quota.

## MITIGATION STRATEGIES

- The site was designed to minimize fish losses.
- The Douglas Point Headland was chosen for the site because of the characteristic intense wind, waves and ice scouring, which **naturally deter fish**.
- **Velocity caps** on the deep water intakes reduce the current speed and change flow direction to make it **easier for fish to avoid**.



## OFFSETTING PLAN

Bruce Power is working to improve fish populations in Lake Huron, where fisheries provide work and tourism for the communities.

- Providing the Ministry of Natural Resources with funds to stock 50,000 yearling lake trout into Georgian Bay each year.
- Working with partners to remove the Truax Dam in Walkerton to give fish access to high quality upstream habitats.
- Monitoring of the Saugeen River and tributaries to document fish abundance and productivity.
- Continuing remediation on the Shebeshekong River near Parry Sound, with the Eastern Georgian Bay Stewardship Council:
  - Walleye upstream access points have been restored.
  - Ongoing monitoring will carry on to quantify the benefits.

## Projects Funded by Bruce Power

Bruce Power is committed to protecting the environment and supporting local partner groups in their projects.

- Petun Dam removal on Black Ash Creek (Collingwood), Nottawasaga Valley Conservation Authority
- Restoration of local streams throughout Bruce County, Lake Huron Fishing Club
- Rehabilitation of the rainbow trout nursery habitat in Beeton Creek (Tottenham), Nottawasaga Valley Conservation Authority
- Control of the invasive *Phragmites australis* in Lake Huron coastal wetlands, Invasive Phragmites Control Centre
- Agricultural stream improvements in the Scott Drain Tributary (Belgrave), Maitland Valley Conservation Authority
- Habitat creation for small-bodied fish in Baie du Doré

