

Community Update: Gizzard Shad Run at Bruce A – February 2025

A significant Gizzard Shad event has been ongoing at Bruce A since late January, leading to large-scale fish impingement at the pumphouses. This issue, triggered by a large influx of Gizzard Shad into the intake channels, has led to over 2.6 million Gizzard Shad being impinged at Bruce A as of February 24, 2025. The Saugeen Ojibway Nation Environment Office has been closely monitoring the situation alongside Bruce Power to assess environmental impacts and mitigation efforts.

What is Fish Impingement?

Impingement occurs when fish are trapped against water intake screens by the force of water being drawn into a facility. This can result in injury or death if fish are unable to escape. In this event, high numbers of Gizzard Shad have been drawn into the intake channel and become impinged at Bruce A's pumphouses.

Current Situation

- **Fish Loss Estimates:** Between January 30 and February 24, an estimated 2.6 to 3.5 million Gizzard Shad have been lost.
- **Cause of Event:** Gizzard Shad are naturally sensitive to cold water temperatures, which can lead to mass die-offs in the wild. The warm water from Bruce Power's discharge channels attracts them, and some have become trapped in the intake system.
- **Operational Challenges:** The presence of large numbers of fish at Bruce A has caused operational concerns, including the need to adjust cooling systems and take preventative measures to avoid damage to plant infrastructure. The intake and recirculation channels have been thoroughly monitored, and some modifications are being planned to address these issues.

Mitigation & Removal Efforts:

- **Barrier Nets:** Installed at key locations to reduce fish movement into intake channels. Additional net installations are planned for the discharge channel to prevent further fish entry.
- **Gillnetting & Trawling:** Daily efforts are removing approximately **3,000 lbs of fish per day**, preventing further accumulation.
- **Manual & Mechanical Removal:** Specialized equipment and teams are working to clear impacted areas and prevent blockages.
- **Temperature Adjustments:** Intake temperatures are being carefully managed to minimize stress on fish populations while maintaining operational safety.

- **Ongoing Cleanup:** Crews are working to **clean screens and remove fish debris** to keep cooling water systems running effectively.

Operations at Bruce A & B

- **Bruce A:**
 - Units 1 and 2 are methodically returning to full power operation following adjustments to mitigate fish impingement risks.
 - Unit 4 remains online with reduced cooling water flow to help prevent further fish losses.
 - Continuous monitoring and removal efforts are in place to maintain safe operations.
- **Bruce B:**
 - Higher-than-normal fish presence has been recorded, but at significantly lower levels than Bruce A.
 - Daily drone monitoring and manual fish removal efforts are ongoing.
 - Temperature control measures in the intake channel are being used to minimize temperature shock to the fish while also preventing frazil ice formation.
 - Operators are checking pumphouse conditions every 1-2 hours to ensure continued safety and efficiency.

Next Steps

The Environment Office continues to work closely with Bruce Power, providing oversight and recommendations for mitigation strategies. The situation is being closely monitored, and Bruce Power will continue to share data with SON to assess the effectiveness of mitigation measures. SON Aquatic Ecologist and the Energy Manager are involved in reviewing ongoing data and ensuring that the community's environmental priorities are being considered.

The Environment Office is:

- Reviewing data and research to better understand how to prevent similar events.
- Continuing discussions with Bruce Power on long-term solutions, including intake protection improvements. SON has emphasized the need for effective strategies to reduce fish impingement at its source, including possible modifications to intake and recirculation structures.
- Exploring potential regulatory engagement with the CNSC and DFO to strengthen environmental safeguards.

We will continue to keep the community updated as more information becomes available. The Environment Office is committed to ensuring that SON's environmental rights and interests are upheld throughout this process.

For further details or if you have concerns, please reach out to the Energy Manager.

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