

What do wetlands really do for our water? They clean it.

CASE STUDY: ST-PIERRE-JOLYS, MANITOBA

When the town of St-Pierre-Jolys began using a wetland to clean water flowing from its lagoon, water tests showed that phosphorus levels dropped significantly.

- + Phosphorus in the lagoon water was more than 70% higher than allowed by provincial guidelines.
- + On average, the wetland reduced phosphorus load by 60%, bringing it well below the concentration allowed by provincial guidelines.
- + The phosphorus in the wetland-treated water was lower or more diluted than the river water it was released into.



Source: Native Plant Solutions

What do wetlands really do for our water? They help protect us from flooding.

CASE STUDY: CAMROSE CREEK, ALBERTA

Research shows that wetlands, serving as natural infrastructure in this central Alberta watershed, provide ecosystem services and environmental benefits at an estimated value of:

- ⊕ \$1.25 million in flood protection
- ⊕ \$1.8 million in social benefits
- ⊕ Approximately 900,000 tonnes of carbon stored

Source: Pattison-Williams, J.K. 2018. *A Business Case for Wetland Conservation in the Camrose Creek Watershed*



What do wetlands really do for our water?

They protect rivers, lakes and beaches from algae blooms.

CASE STUDY: RESTORED WETLANDS IN SOUTHERN ONTARIO

Source: Determining the Nutrient Retention Capacity of Newly Restored Wetlands in Southwestern Ontario

Current research near Lake Erie is showing that restored wetlands are “phosphorus sinks,” removing excess nutrients that can cause blue-green algae outbreaks. The eight wetlands in the study all receive surface-water runoff from agricultural fields. **Early findings include:**

- ⊕ Overall reduction by 59% of the most problematic form of phosphorus.
- ⊕ Three of the wetlands reduced phosphorus by 93-99%.

