LUSH IMPACT REPORT

2018-2020





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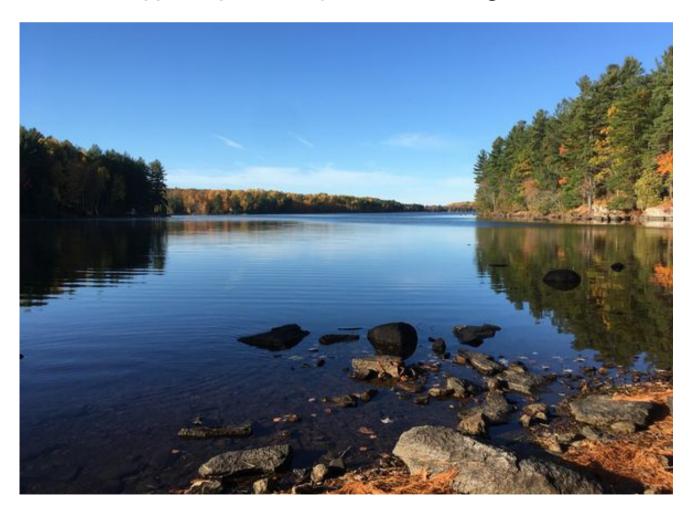
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INTRODUCTION

Increasing development along Canada's lake and rivers is causing critical fish habitat to become compromised and degraded. Watersheds Canada, in partnership with local organizations, is working to protect, enhance, and restore various freshwater fish habitats. These include walleye and trout spawning beds restoration, cold-water creek enhancements, and adding woody debris back into our lakes with brush bundles.

With the support of LUSH Charity Pot, Watersheds Canada completed 6 fish habitat projects from 2018-2020 that will support aquatic ecosystems for future generations!



BACKGROUND

ABOUT WATERSHEDS CANADA

Watersheds Canada is a federally incorporated non-profit organization and registered Canadian charity. We are committed to providing programs to communities across the country to help enhance and protect the health of lakes and rivers. Our vision is for communities to come together to care for their waters, resulting in clean, healthy lakes and rivers that will support humans and wildlife for years to come.



KEY SPECIES

Many fish are highly ecologically significant in freshwater ecosystems. Fish species, such as Walleye and Brook Trout, are an important component of Ontario's aquatic biodiversity and a primary indicator of healthy aquatic ecosystem. For example, Brook Trout thrive in only the coldest and cleanest of waters, typically in forested environments, and are dependent on groundwater discharge for spawning. By enhancing the habitat and spawning beds, there are positive impacts to not only the fish but also other species, and improving the overall health of lakes and rivers.









GEOGRAPHICAL CONTEXT

Our projects took place in the following communities: Township of Lanark Highlands (Easton's Creek), Township of North Frontenac (Kashwakamak Lake, Pine Lake), Town of Westport (Mary Jane's Creek) and Central Frontenac Township (Long Lake). Communities across Ontario have been and will continue to be positively impacted by funding LUSH provided through the Fish Habitat Enhancement Toolkit.

MAP OF PROJECT SITES IN EASTERN ONTARIO

Fish Habitat **Pine Lake Easton's Creek Enhancement Toolkit** Township of Township of **Across Ontario** Lanark Highlands North Frontenac Free resource for Coldwater creek Brush bundle project organizations restoration project and community groups Flower Station Ν Ottawa < Toronto • Lanark Plevna McDonald's Snow Road Corners Station Perth Cloyne Sharbot Lake Arden Westport Parham Kaladar Kashwakamak Lake **Long Lake Mary Jane's Creek** Township of Township of Town of Westport Central Frontenac North Frontenac Walleye enhancement Walleye enhancement

project

project

Brush bundle project

KASHWAKAMAK LAKE

The Kashwakamak Lake brush bundle project was implemented in 2019 by Watersheds Canada and Peter Johnson, the Lake Steward of the Kashwakamak Lake Association, and with generous funding from the LUSH Charity Pot. Kashwakamak Lake is located about 90 minutes west of Perth, Ontario in the Township of North Frontenac. Locations were chosen where the bundles would both increase wildlife habitat availability while also avoiding human activities such as boating. Sunken logs, trees, branches, and root balls provide excellent habitat for wildlife, including fish, turtles, birds, and invertebrates. Brush piles can provide fish, such as perch, bass, and walleye, with a food source, as well as shaded areas to rest, spawn, and escape predators.



IMPACT OF THE KASHWAKAMAK LAKE **BRUSH BUNDLE PROJECT**

Ten brush bundles were built and placed in specific areas of the Kashwakamak Lake. Underwater woody debris is a healthy and important component of lake environments. Reintroducing this woody debris to the lake bottom improved the fish habitat in Kashwakamak Lake.

How we spread the word about this project, LUSH's support, and our impact on the community:

- This project is featured on the Fish Habitat Programs section on the Watersheds Canada website
- We published a media release and shared it with local news sources
- This project was highlighted in our January 2021 newsletter
- We posted about this project on Instagram and Facebook



dation will allow us to create a fish habitat enhancement toolkit to help other community groups restore native fish habitat on their freshwater bodies. Stay tuned in 2020 for this free toolkit! See more



PINE LAKE

Pine Lake was an excellent candidate for an in-water fish habitat enhancement project because it was previously identified as having been impacted by fish habitat loss. Pine Lake is located about 60 minutes west of Perth in the Township of North Frontenac, Ontario. This project would not have been possible without funding from the LUSH Charity Pot, as well as Nathaniel Holloway who was the volunteer who initiated this project. Brush bundles were used to enhance fish habitat in Pine Lake. Brush bundles provide areas to rest, food sources and habitat for many species. They are beneficial to fish, such as perch, bass, and walleye, and other wildlife like turtles, birds, and invertebrates.



IMPACT OF THE PINE LAKE BRUSH BUNDLE PROJECT

With the help of local volunteers, staff from Watersheds Canada built and deployed twelve brush bundles on October 15, 2019. Underwater woody debris is a healthy and important component of lake environments.

Reintroducing this woody debris to the lake bottom improved the fish habitat in Pine Lake.

How we spread the word about this project, LUSH's support, and our impact on the community:

- This project is featured on the Fish Habitat Programs section on the Watersheds Canada website
- We published a media release and shared it with local news sources
- We created a YouTube video that showcased the process of installing the brush bundles
- This project was highlighted in our January 2021 and March 2021 newsletters
- We posted about this project on Instagram and Facebook



EASTON'S CREEK

Thanks to funding from LUSH Charity Pot and the Cabela's Canada Outdoor Fund, Watersheds Canada was able to participate in a Brook Trout Habitat Enhancement collaborative project at Easton's Creek, Ontario.

Easton's Creek is located about 45 minutes northwest of Perth, Ontario in the Mississippi River Watershed. Waddle Creek, one of the few remaining coldwater brook trout creeks in this watershed, flows into Easton's Creek and continues into the Clyde River. Coldwater streams are significant tributaries in the proper function of natural ecosystems as they help moderate temperatures in the larger rivers and lakes they flow into. Coldwater bodies hold more oxygen which is needed to support the full life cycle of fish species like Brook Trout.



IMPACT OF THE EASTON'S CREEK RESTORATION PROJECT

This project increased stream cover through tree planting to shade and cool the water at Easton's Creek, and increased shoreline habitat. Brook trout benefited from this project because they rely on cold water temperatures. Also, providing additional stream cover, overhanging vegetation cools down the water and better supports the food web in the area.

How we spread the word about this project, LUSH's support, and our impact on the community:

- We hosted two in-person skillbuilding demonstrations
- This project is featured on the Fish Habitat Programs section on the Watersheds Canada website
- We published a media release and shared it with local news sources
- We created a YouTube video that demonstrated the process of Brook Trout habitat enhancement
- This project was highlighted in our November 2019, December 2019, and January 2021 newsletters
- We posted about this project on Facebook and Twitter



MARY JANE'S CREEK

Mary Jane's Creek is found near Westport, Ontario and was chosen for its potential to increase the Walleye spawning habitat available downstream of a dam. Walleye spawning beds are typically gravel shoals or rocky shallows with wave action present. Moving water oxygen in the water facilitates spawning. In the Mary Jane's Creek Project, Watersheds Canada placed a total of 108 tonnes of washed river stone in and along the banks of the creek. Before the stones were placed in the water, silt curtains were put up to limit the amount of sediment moved off-site that could possibly impact the surrounding system.



IMPACT OF MARY JANE'S CREEK WALLEYE ENHANCEMENT PROJECT

Since the walleye bed enhancement in 2019, volunteers from the Westport Area Outdoors Association have completed annual walleye spawning observation surveys and submitted the findings to the Ontario Ministry of Northern Development, Mines. Natural Resources and Forestry. In the first year alone, the walleye spawning bed was well used, with fish being observed most evenings in April 2020. This is encouraging that walleye are returning to the area, and we look forward to their populations continuing to recover.

How we spread the word about this project, LUSH's support, and our impact on the community:

- This project is featured in the Fish Habitat section of Watersheds Canada website
- We published a media release and shared it with local news sources
- We created a YouTube video showing the process of restoring the Walleye spawning bed
- This project was highlighted in our November 2019 newsletter
- We posted about this project on Facebook and Instagram



LONG LAKE

Long Lake is located in Central Frontenac Township just north of Parham, Ontario, a small village along Highway 38, in Frontenac County. Long Lake was a perfect candidate for a winter walleye spawning bed enhancement because it has very little flow and ice movement in the spring. In February 2019, volunteers brought snowmobiles, ATVs, tractors, sleds, and trailers to transport the washed river stone 1.5 kilometres across the ice to the spawning beds. Volunteers then dumped and spread out the rock on top of the ice, where it would then dropped into place in the spring once the ice melted. The Sharbot Obaadjiwan First Nation participated in the enhancement and the 1st Drummond Scouts helped spread rock on the beds.



IMPACT OF THE LONG LAKE SPAWNING BED ENHANCEMENT

Walleye, also known as pickerel, are a highly prized sports fish and an important part of the biodiversity in many waters of Ontario. By enhancing Walleye habitat in Long Lake we protected the ecosystem and strengthened the fish populations. This project fostered collaboration among many stakeholders to help make an impact in their community by protecting their local freshwater.

How we spread the word about this project, LUSH's support, and our impact on the community:

- This project is featured on the Fish Habitat Programs section on the Watersheds Canada website
- We published a media release and this project was featured in an article by Frontenac News
- We posted about this project on Facebook, Instagram, and Twitter
- This project was presented at the 2019 Lake Links workshop



Watersheds Canada November 3, 2019 · 🚱

Did you miss Melissa Dakers and Terry Eccles' Lake Links presentation about the Long L Walleye Enhancement Project? You can now view the full presentation on our Youtube particles of the Medical Project Consider Right Habitation.



FISH HABITAT ENHANCEMENT TOOLKIT

In partnership with the Lanark County Stewardship Council, Watersheds Canada created and distributed a free Fish Habitat Enhancement Toolkit. Generously funded by the LUSH Charity Pot and the Ontario Trillium Foundation, the Fish Habitat Enhancement Toolkit provides grassroots organizations and community groups with project guides, updated protocols, and accompanying videos to identify suitable sites and successfully enhance various types of fish habitat projects, including: walleye spawning bed enhancements; in-water fish habitat enhancement with woody debris; and cold-water creek enhancement projects.



IMPACT OF THE FISH **HABITAT ENHANCEMENT TOOLKIT**

Many volunteer groups are looking for nature-based solutions to restore local fish habitat but they do not know where to start. The Fish Habitat Enhancement Toolkit builds capacity within the freshwater movement by giving community groups and grassroots organizations three different types of enhancement projects and the necessary resources they need to complete them.

How we spread the word about this project, LUSH's support, and our impact on the community:

- This project was featured in the Freshwater Stewardship Community webinar series
- This project is featured on the Fish Habitat Programs section on the Watersheds Canada website
- We published a media release and shared it with local news sources
- This project was highlighted in our April 2021 newsletter
- We posted about this project on Facebook, Instagram, and Twitter
- This project was featured in the Blue Fish Radio podcast





Thanks to generous funding from @ONTrillium, @lushcosmetics, @cabelascanada, and @environmentca, Watersheds Canada and the Lana County Stewardship Council are proud to announce the creation and release of a free Fish Habitat **Enhancement Toolkit!**

watersheds.ca/our-work/habit...



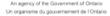
ACKNOWLEDGEMENTS

Thank you to all the funders and partners who supported this fish habitat restoration work possible!



















Fisheries and Oceans Canada

Pêches et Océans Canada











Mississippi Valley onservation Authority









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Environment and Climate Change Canada

Environnement et Changement climatique Canada



Nedow Constr. Ltd

Westport Area Outdoors Association

Dalhousie Lake Association

Arnold Gibson Tree Farm

APPENDIX

MEDIA AND COMMUNICATIONS MATERIALS

KASHWAKAMAKIAKE

https://watersheds.ca/our-work/habitat-programs/in-water-structures/kashwakamak-lake/

https://watersheds.ca/media-release-kashwakamak-lake/

https://www.instagram.com/p/B3eeSmBBNBe/

https://www.facebook.com/watershedscanada/posts/2701937116503489

PINE LAKE

https://watersheds.ca/our-work/habitat-programs/in-water-structures/pine-lake/

https://www.facebook.com/watershedscanada/posts/2712168948813639

https://watersheds.ca/media-release-pine-lake/

https://www.youtube.com/watch?v=2Lti8LprUFU

https://www.instagram.com/p/B3pi5gRh-aq/

EASTON'S CREEK

https://www.facebook.com/watershedscanada/posts/2856067251090474

https://www.facebook.com/watershedscanada/posts/2597777443586124

https://www.facebook.com/watershedscanada/posts/2713927745304426

https://www.facebook.com/watershedscanada/posts/2669374333093101

https://www.facebook.com/watershedscanada/posts/2592258240804711

https://watersheds.ca/media-release-eastons-creek/

https://www.youtube.com/watch?v=XgKMTnP50LI

MARY JANE'S CREEK

https://watersheds.ca/our-work/habitat-programs/walleye-projects/mary-janes-creek/

https://www.facebook.com/watershedscanada/posts/2822165541147312

https://www.facebook.com/watershedscanada/posts/2695343263829541

https://www.facebook.com/watershedscanada/posts/2480493261981210

https://watersheds.ca/media-release-mary-janes-creek/

https://www.youtube.com/watch?v=r47iVVG5B7U

https://www.instagram.com/p/B3W6D-6h 9d/

LONG LAKE

https://watersheds.ca/our-work/habitat-programs/walleye-projects/long-lake/

https://www.facebook.com/watershedscanada/posts/2746699468693920

https://www.facebook.com/watch/?v=815187978861060

https://www.facebook.com/watershedscanada/posts/2296593740371164

https://www.facebook.com/watershedscanada/posts/2274909655872906

https://watersheds.ca/lake-links-2019/

https://www.frontenacnews.ca/central-frontenac-news/item/12919-long-lake-walleye-restoration-project-takes-advantage-of-the-fact-that-ice-melts

FISH HABITAT ENHANCEMENT TOOLKIT

https://watersheds.ca/our-work/habitat-programs/fish-toolkit/

https://www.facebook.com/watershedscanada/posts/4082220385141815

https://www.facebook.com/watershedscanada/posts/4133967126633807

https://www.facebook.com/watershedscanada/posts/4133965286633991

https://www.facebook.com/watershedscanada/posts/4133957173301469

https://www.facebook.com/watershedscanada/posts/4049887201708467

https://www.facebook.com/watershedscanada/posts/4049884201708767

https://www.spreaker.com/user/5725616/e343-watersheds-canada-and-fish-habitat-

https://www.instagram.com/p/CRgzgZmLgeM/

https://twitter.com/WatershedsCAN/status/1370483743446732801

https://twitter.com/WatershedsCAN/status/1372273783503945728

https://twitter.com/WatershedsCAN/status/1374758133571145734

https://twitter.com/WatershedsCAN/status/1375093866047606785

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https://twitter.com/WatershedsCAN/status/1380636453810675712

https://twitter.com/WatershedsCAN/status/1393316690474061824

https://twitter.com/WatershedsCAN/status/1404856227444654084

https://twitter.com/WatershedsCAN/status/1414957789089124352

https://twitter.com/BlueFishnews/status/1434912138972258305

