



**Alberta  
Emerald  
Foundation**

Emerald Youth Grants

# Study Guides

Vermilion River Watershed Alliance



**30th Annual Emerald Award Recipient**

Shared Footprints

**Synocrude**

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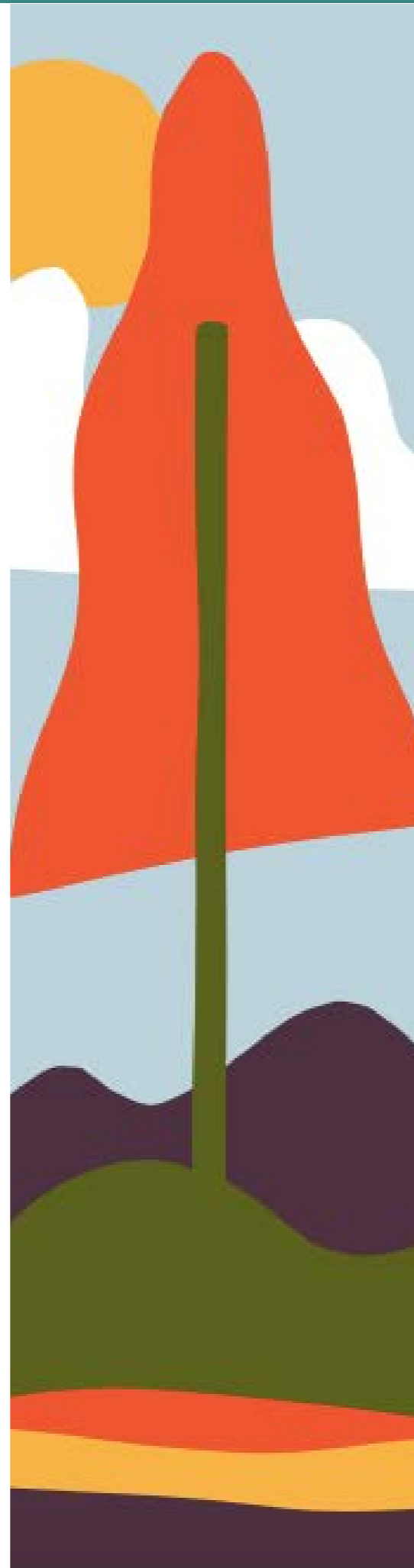
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## About the Alberta Emerald Foundation



*We're Alberta's environmental good-news storytellers!*

The Alberta Emerald Foundation (AEF) is nonprofit organization that showcases and inspires our province's environmental achievements through the annual Emerald Awards. Through our Sharing Stories Communications Strategy, the incredible work of Emerald recipients is highlighted and celebrated year-round. What began as the Emerald Awards in 1992 has evolved into an ongoing conversation.

The AEF empowers the next generation by providing grants to youth-led and youth-targeted environmental initiatives in our province. The Emerald Educational Engagement Grants Program funds up to 30 groups a year for their dream environmental project inspired by the Emerald Documentary Series, What On EARTH Can We Do? Podcast, and Emerald Speakers Series. After finding inspiration from this content featuring Emerald recipients, submit your pitch to us online. If it's accepted, you will receive \$750, thanks to our sponsor Syncrude Canada Ltd., to make your project a reality.

We encourage you to use this study guide as a resource to help you along in your project's journey. For more information, please visit

[www.emerald.foundation.ca](http://www.emerald.foundation.ca)

# Overview

*What they're all about*

Project: Vermilion River Watershed Restoration and Enhancement Project

Mission: To support stakeholder engagement that fosters a collaborative approach working towards a sustainable watershed.

The Vermilion River Watershed Alliance (VRWA) is a local **non-profit group** formed to revive the Vermilion River Watershed, which is part of the North Saskatchewan River **watershed** in Alberta. Through their efforts, the VRWA can improve **water quality**, manage flooding, reduce **erosion**, retain soil and moisture content, and protect local wildlife.

**Wetlands** and **riparian areas** are **ecosystems** that perform vital **ecological services** in a **watershed**. They store water, manage flooding, retain sediment and contaminants, serve as a habitat and food source for wildlife, maintain **biodiversity**, and offer leisure and natural scenic beauty. These services help people, other living things, and the overall health of natural systems that are linked within watersheds. Citizens, watershed stakeholders, and conservation groups know that wetlands and riparian areas must be protected and **restored** to create sustainable watersheds.



In the spirit of shared environmental goals and **collaboration**, the VRWA worked with local, agricultural **landowners**, municipalities, and students to enhance and **restore** over 20 kilometres of **riparian areas** along the Vermilion River, creeks, and tributaries and 157 hectares of **wetlands** within the Vermilion River Watershed. In partnership with the North Saskatchewan Watershed Alliance, and through grant funding from the Alberta Government and Environment and Climate Change Canada, participants proposed a variety of projects on their land that would protect wetlands and riparian zones. Over 30 **landowners** participated in the brand-new program over the course of four years (2016-2019).

The actions implemented under this program helped to work towards some of the following goals:

- Improve reliability of surface water supply.
- Maintain or improve surface **water quality**.
- Maintain or improve aquatic **ecosystem** health.



# Key Terms

*Know your lingo*



**Biodiversity:** the variety of living things in a given space.

**Collaboration:** when people work together to complete a task. Collaboration involves co-operation and teamwork, and sharing ideas, knowledge, and skills to reach the same goal.

**Ecological services:** processes in which nature and the environment provide resources for humans to use. For example: water and air.

**Ecosystem:** all of the living and non-living things in an area. This includes all of the plants, animals, and other living things that make up *communities* of life in an area.



**Erosion:** the wearing away of land and rocks by forces such as water and wind. This can cause parts of rock and earth to move to new places, and can shape the land.



**Landowners:** people that own land, especially large amounts of land.



**Nonprofit organization:** sometimes called a “charity”, a business that does not operate to make profits and instead, functions to further social causes and help the public.

**Riparian Areas:** the areas bordering (on the sides of) rivers and other bodies of surface water.

**Restore/Restoration:** the action of returning something to or bringing something back to its original or healthy state. This can be done through repairing or cleaning something.

**Watershed:** A watershed is a piece of land that drains surface water into a larger water body, like a river or lake. This provides water for drinking, farming, industry, leisure, and wildlife

**Water Quality:** a measure of the condition of water, and how clean it is for living things, including humans, animals, and plants.

**Wetlands:** areas of land that are covered by shallow water. There are four main types of wetland ecosystems: marshes, swamps, bogs, and fens.

# Conversation Questions

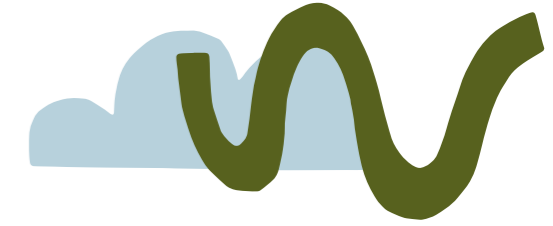
*Let's talk about it*

- What problems does VRWA address? How do they address these problems?
- What do wetlands do to help humans? Why are wetlands important?
- How can humans help watersheds?
- What does collaboration mean to you? Describe a time that you have collaborated with other people, or with animals.
- How could erosion be harmful?
- What kinds of animals do you think live in the Vermilion River Watershed?
- If you were to start a non-profit organization, what types of problems would you want to address?



# Continuing Work

*Inspiration for your Emerald Youth Grant*



- Organize or attend a clean-up day at your local watershed or river.
- Organize a trip to a local watershed or natural area. Make sure to always take all your garbage and recycling with you after a day in nature.
- Write a proposal for how you can improve watershed health in your community and work in a group to implement it.
- Conduct an “ecosystem analysis” of your schoolyard or local park, by taking notes on how many living and non-living things make up the ecosystem community.
- Hire a scientist to investigate the health of the watershed and waterbodies around where you live.
- Organize a fundraising activity, such as a bake sale or classroom cookbook, and donate proceeds to an organization dedicated to bettering the environment. You could choose to donate to the Alberta Emerald Foundation, EALT’s endowment fund, in which the Edmonton Community Foundation matches all donations, or another deserving environmental organization in your community.
- Hire a wetland specialist to give a tour of a wetland in your area.
- Organize an urban ecosystem tour in your community, where you walk to see different urban ecosystems and provide facts and information about each ecosystem as you encounter them.



# Resources

*Click to discover*

[Vermilion River Watershed Alliance Website](#)

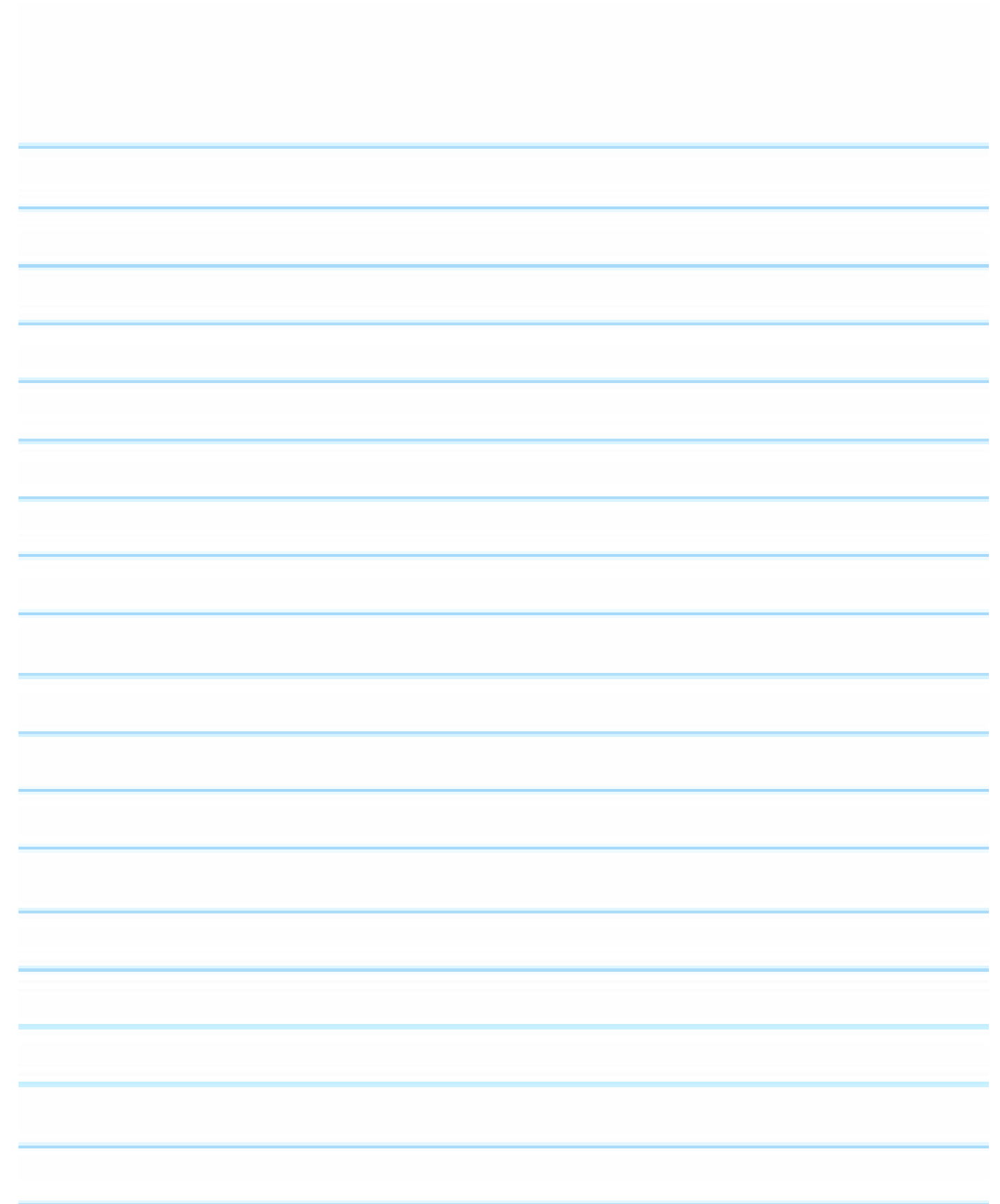
[VRWA Restoration and Enhancement Projects](#)

[Watershed Map of Alberta](#)

[Britannica Kids](#) (used for Key Terms)

[36 environmental project ideas that you could get funding for!](#)

# Notes





# Emerald Youth Grants

The AEF would like to thank Syncrude Canada Ltd. for their sponsorship of the Emerald Youth Grants Program. As well, we'd like to thank Hoopla Media for their work on the Emerald Documentary Series.

This study guide was created and written by AEF Summer Student, Katherine Rogers.

[Click to apply for an Emerald Youth Grant!](#)

