

## STUDY GUIDE

**Emerald Youth Grants** 



Syncrude





### THE AEF

Who We Are.

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The Alberta Emerald Foundation (AEF) has been the goodnews environmental storytellers since 1991. We are a 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 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 emeraldfoundation.ca.



#### What they're all about.

Mission: the Dale Hodges Park project aims to restore native riparian habitats and bring people back to the river through recreation and park amenities, with a primary focus of treating stormwater before it enters the river.

Calgary's **stormwater system** usually runs

underground to collect rainwater and drain it into the river. However, this water is untreated so it carries sediments and contaminants from the road into the river. The sediments can quickly pollute the river and affect the water quality for the organisms that live in and around it. One of these stormwater systems



used to exist under Dale Hodges Park and the **untreated water** from 8 communities freely entered the Bow River.

Sans façon, WATERSHED+, City of Calgary, AECOM, O2 Planning + Design,

Source2Source, and Wilco Contractors Southwest Inc. collaborated to restore **ecological integrity** while treating the stormwater. Over the course of 8 years, they designed and built a stormwater treatment system that stands above ground, combined into Dale Hodges Park. The system removes around 95% of the sediments from the stormwater before it reaches the river. The **reclamation** of this land has created many **riparian habitats** for birds and animals, as well as provided a space for Calgarians to enjoy.

Because the stormwater treatment system is in the park and **integrated** with the city, it allows for people to see this process and take responsibility to reduce **urban impacts** to nature while promoting **environmental stewardship**.





Know your lingo.

Stormwater system:

an underground system that moves throughout the city to collect rainfall and guide it towards the rivers and lakes. Often this water becomes contaminated with oil, pesticides, and sediments from the roads.

**Sediments:** 

solid material such as soil, minerals, or rocks that are carried by stormwater into rivers which can pollute the river.

**Contaminants:** 

chemicals that accidentally or purposefully enter the environment and do not break down very easily. This is often due to human activity.

Untreated water:

water that has not been chemically altered, filtered, or boiled to remove contaminants.

**Ecological** integrity:

the ability of an ecosystem to support the life and processes of its organisms.

**Reclamation:** 

the act of restoring something to its previous, healthier form.

Riparian habitats:

the interface of the land and a river; the edges of wetlands.



**Integrated:** 

to bring together many parts into a whole.

**Urban impacts:** 

environmental consequences of the actions made by cities and people that live in the cities, such as air pollution and disruption of natural habitats.

**Environmental** stewardship:

the responsible use and protection of the natural environment through the application of sustainable practices.







# CONVERSATION QUESTIONS

Let's talk about it.

What
do you think is
the impact of having
a stormwater system
that is above ground and
visually accessible to the
community?

there been times
where you've noticed
people carelessly disposing
of chemicals and garbage
into the environment?

What
can you do
at home to manage
stormwater runoff and
keep it clean?

What
type of chemicals
do you use at home or at
school that might be bad for
the environment? How do you
usually dispose
of them?



Why
do you think
collaboration is important
in environmental
projects?





Inspiration for your EEEG project.

Take a visit to Dale Hodges Park.

Find and participate in a community water protection project.

After getting permission from your city, organize a storm drain stenciling project. Using words and pictures, encourage people not to dump waste into the drainage systems through art.

Organize a project with your school to clean up a stream or small river. Research native vegetation and plant along the banks to help prevent erosion and filter sediment.

Make your own environmentally-friendly fertilizer to minimize any chemicals that enter the stormwater systems.





### RESOURCES

### NOTES

Click to discover.

City of Calgary - Dale Hodges Park

Strathcona County Stormwater Management System

10 Ways to Protect Our Water

Ideas for Storm Drain Stencils (that you can purchase!)

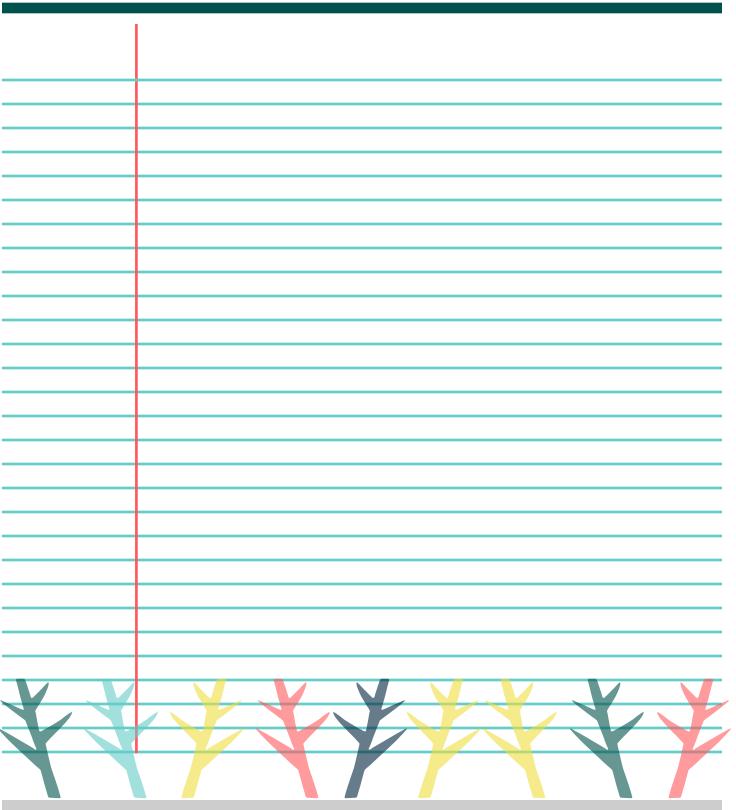
How to Make Liquid Fertilizer at Home

Volunteer at Banff National Park

**How to Dispose of Household Chemicals** 

Why are Chemicals Bad for The Environment?







### 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** and **Studio Hazel** for making our content look so good.

This study guide was written and designed by AEF summer student Leslie Guo.

Click to apply for an Emerald Youth Grant!

Let's get social!

