

PROJECT SUMMARIES

1. Brooks Composite High School

Brooks



Brooks Composite High School's goal was to start an aquaponics food production system to be able to produce lettuce for the cafeteria and food classes. They had a fish tank donated and built the system, then faced some obstacles in regards to water pumps and lettuce seeds. That being said, the students plan to start again early next school year and continue using the system to grow vegetables for the student body.

2. Harry Collinge High School

Hinton



Firstly, Harry Collinge students presented to the school staff about the information they were taught during the Summit and made suggestions about what they wish to accomplish in the future for the school and community.

Next, to educate younger students about the effect of pollution on local streams, they invited the Athabasca Watershed Council to the school to view the presentation. They also accompanied the Grade 9's to nearby Hardisty Creek to evaluate the various invertebrates present, and educated them about what they reflect on the pollution levels of the water and their effects on water quality.

Finally, the students gave presentations in each of the Grade 8 classes on the importance of water and energy and how energy pollution is affecting the Athabasca glacier and watershed. The Generate/Navigate experience laid the foundation for establishing a sustainability club at Harry Collinge, which will continue into the new school year.

3. Holy Redeemer Catholic Jr/Sr High School *Edson*



Holy Redeemer Student Ambassadors took a trip to a Vanier Elementary Grade 4 classroom, where they shared what they learned about energy, water, pollution, and sustainability while attending the Generate and Navigate Summit in Canmore back in March. The Ambassadors also reviewed recycling expectations with the class to promote the waste reduction program at the Living Waters Schools in Edson. The purpose of the presentation was to inspire younger students to be energy and water conscious in their daily lives and better utilize the waste reduction program that is available to them.

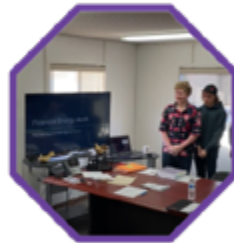
4. Medicine Hat High School *Medicine Hat*



Medicine Hat High School enhanced the green in their school by incorporating three grow boxes in the school courtyard. Additionally, they were invited to speak at the local Horticultural Society to share their successes and make connections in the community.

They also had an Earth Day event to promote healthy and conscious living and celebrate what makes students hopeful for the future. The team is currently working on a prototype for a solar powered water pump system that will water the plants, and next year they are planning on expanding and enhancing the seed prep process and continuing to enhance their indoor grow program!

5. New Myrnam School *Myrnam*



New Myrnam aims to convert the Village of Myrnam's Career Training Education Center (CTEC) building into a net zero electrical building. Previous work has included a forensic energy audit, with results presented by the students to the Village of Myrnam Council. The team will now proceed with the installation of a ground mounted solar array, followed by monitoring and maintenance. The project will provide valuable insights into the challenges and opportunities of implementing renewable energy solutions in a rural community.

6. North Peace Secondary School

Fort St. John, BC



North Peace students went to an elementary school and taught six classes of students, aged from 6 to 9 years old, about the importance of bees and biodiversity. After the presentation, the kids did an activity where they looked for three different plants or animals. This was meant to be done outside, but due to weather conditions, was kept inside. As a prize of sorts, the kids were given a small bag of wildflower seeds to take home and plant. In the future, the students plan to create a self-sustaining garden at the school containing wild, native, plants including saskatoon berries, lupin and wolfwillow.

7. Rundle College

Calgary



Rundle College students created a bingo card for the primary students to learn more about their energy and water usage. They also presented at Spring Assembly outlining the consequences of excessive energy use in their school, as well as the impacts on water quality and usage in their community, and gave the students ideas about how to reduce their energy and water usage. Next year, they plan to complete an Energy Audit on energy use of the Conklin building using energy level monitors.

8. St. Francis Xavier School

Edmonton



In cooperation with the school's environmental club, St. Francis students chose to develop a school-wide thrift store to help fight consumerism and promote the use of second-hand clothes. Awareness was raised (in a paper-free way!) by using QR codes and school announcement screens to advertise the thrift store and help reduce the stigma surrounding pre-used clothing. Students also completed outreach with the neighbouring elementary school by facilitating an activity making bird feeders out of pinecones!

9.

St. Mary Catholic School

Westlock



St. Mary students identified that the lights in their school's bathrooms were inefficient incandescent bulbs and did not have motion sensors. They recognized that installing approximately 90 LED programmable motion sensor light switches into all the bathrooms in the school would greatly decrease the school's energy usage and ecological footprint.

They presented their proposal to the school division and it was approved! The school division agreed to fund and install motion sensor switches and replace all the incandescent lights with LEDs. They will put these upgrades in during the summer months when no students are present in the building and it will be ready for August 31.

PLANNED PROJECTS

10.

Beaverlodge Regional High School

Beaverlodge

The BRHS Project for Gener8/Navig8 was designed to encourage younger students to enjoy science and give them hands-on learning experiences. The BRHS students wanted to encourage the younger students to think about clean water ideas and ideal living conditions for a variety of animals.

In order to accomplish this, Beaverlodge is completing three teaching projects with Grade 5 students at a local elementary school. The first is building terrariums, the second is building waterwheels, and the third is still being determined.

11. Father Patrick Mercredi High School

Fort McMurray

Father Patrick Mercredi students hope to start an environmental club at their school. The goal is to engage more of the student population and to educate and move forward with issues that are a problem in the Fort McMurray region. As an initial club activity, the students registered with the Rocky Mountain Wood Buffalo Clean Up Campaign and challenged classes to compete in community cleanups. The club received an amazing response from students and staff in its first year and will only continue gaining traction in the new school year.

12. Lethbridge Collegiate Institute

Lethbridge

Lethbridge Collegiate students have the goal to build a living wall using sustainable methods and resources in the wellness center of the school. It will provide an outlet for students to practice sustainability and to enjoy the benefits of living plants. They are in the process of applying for grants to help support the project.

13. Mistassiniy School

Wabasca

Mistassiniy School wants to create a self-sustaining greenhouse and community garden for their new school. The greenhouse will use rainwater to sustain the plants and solar energy to provide heat in the winter months, and will provide an opportunity for the community to become involved in sustainable activities.

14. **O'Chiese First Nation School** *O'Chiese First Nation*

The students intend to implement a paper recycling system within their school. To date, they currently have no recycling beyond pop cans/bottles, and a large amount of paper goes to waste on a daily basis. As far as their understanding goes, within the Nation, they do not have a recycling system, but all items brought to the transfer station are deposited in the landfill.

Their hope is to begin paper recycling in the school with all refuse brought to the eco station in Rocky Mountain House for appropriate disposal and recycling, and in doing so, divert a large amount of recyclable materials from the landfill. Discussions with Recycle Alberta, school admin, and classroom teachers have been positive so far and the recycling program will continue into the new school year.

15. **Old Scona Academic** *Edmonton*

By collaborating with the school's Community Helpers Program, the Old Scona students' mission is to raise awareness on mental, physical, and environmental wellness in the community. The event will be a schoolwide nature walk through a scenic valley that will promote mental health by providing everyone with an opportunity to take a break from their busy lives while being mindful of their surroundings.

During this event the students will also be planting native trees in collaboration with Edmonton's Root for Trees program. Planting trees will connect and engage the community with the environment and encourage them to reduce their ecological footprint through various activities.

16. **Paddle Prairie School** *Paddle Prairie*

Paddle Prairie's project is to grow traditional Indigenous medicine plants for the school and community to have access to. They will be growing the plants indoors in the classrooms, with the intention of eventually moving the garden into the greenhouse on school grounds. The project experienced some hiccups but will continue in the new school year with a fresh cohort of students.

17. **Piikani Nation Secondary School** *Piikani First Nation*

Piikani's larger project goals are to build up outdoor environmental and energy learning infrastructure, alongside increased community opportunities for health, wellness, and career learning. Individual student projects include:

Butterfly Project to establish powered grow tents in elementary classrooms, Indigenous Youth perspectives on energy/environment: interviews and documentary, Art Gallery Fundraiser around Environmental Anxiety, Blackfoot Language and Culture Digital Library, Promotions and Engagements: Behind the Scenes Clips, Skateboard Club, and Greenhouse Infrastructure and Energy Upgrades. The projects will continue into the new school year.

18. **Robert Thirsk High School** *Calgary, AB*

Robert Thirsk students feel we talk about climate a lot, however it's not very visible, so they want to make the vision visible in the natural science classroom. Therefore, Robert Thirsk students are building a Green Energy & Climate Learning Lab that will include a rooftop solar array, micro wind turbine and interactive weather station. The students created a presentation to pitch the project - next steps involve securing grants/funding and getting the principal and school admin on board.

19. Ross Sheppard High School *Edmonton, AB*

Ross Sheppard is planning to build a greenhouse to engage students in learning about sustainability, horticulture, agriculture and aquaculture, and provide a space for community participation. Funding has been secured through Inside Education's A+ For Energy Grant so the project will become a reality in the 2023/2024 school year.

20. Sunchild First Nation School *Sunchild First Nation, AB*

Having access to clean and safe drinking water is a given for almost every household in America, but Sunchild seems to have trouble with safe drinking water; it is not reliable. Sunchild students will complete seven different water tests to determine if their water is safe and reliable to drink. They will test household water first, and then sample the river and creek water using the same procedures. They will then compare data with the local water safety agency on Sunchild.