

Ready, Set, Solve - 2016 Challenges

No.	Challenge Organization	Short Challenge Description
1	District of Saanich	Help us connect with Saanich residents interested in learning about and/or undertaking energy conservation and retrofit programming.
2	Township of Esquimalt	Research and develop draft guidelines for establishing Development Permit Areas that encourage energy, water and GHG reductions in Esquimalt.
3	Centre for Social and Sustainable Innovation, University of Victoria	Develop a mobile app to help students live more sustainably in the region.
4	BikeMaps.org, University of Victoria	Test and report on the effectiveness of different outreach and promotional efforts to increase the number BikeMappers at BikeMaps.org. Help determine key areas of concern for UVic community cyclists.
5	School District 63 (Saanich)	Analyse electricity use from lighting in our schools in order to inform a business case for a lighting control system.
6	Sustainability Office University of Victoria	Investigate the feasibility of edible landscapes and other food growth options on the UVic campus.
7	Sustainability Office, Camosun College	Design an effective outreach campaign that will result in decreased vehicle idling and increased awareness of its negative effects.
8	Environmental Partnerships, CRD	Develop an educational strategy and create tools to celebrate & raise regional residents' awareness that their source control actions are the first step to wastewater treatment regardless of treatment type and level.
9	Environmental Protection, CRD	Create a photo and data inventory of green infrastructure to update the CRD's natural areas atlas.
10	Environmental Resource Management, CRD	Research and pilot a campaign on how to apply the 3Rs of Reduce, Reuse, Recycle to deal with all your 'stuff' at the end of the school year.
11	Regional Planning, CRD	Plan a multi-modal transportation festival to educate, encourage, motivate residents to cycle walk take transit and reduce single occupant use.
12	BC Sustainable Energy Association Victoria Chapter	Develop engaging public outreach materials explaining how electricity is measured, produced and used for use at community events.
13	Canadian Passive House Institute West	Research and present on successful energy-efficient building incentives that are currently proposed and/or implemented by local and senior levels of government in Canada.
14	Creative United for the Planet	Develop a social media and advertising plan to encourage students (grade 7 through post-secondary) to attend the Creatively United for the Planet Festival (Late April 2016)
15	Creative United for the Planet	Design and lead your own sustainability workshop(s) or educational display or activity on the topic of your choice at the 5th Annual Creatively United Earth Week Festival.
16	Friends of Shoal Harbour Society	Develop a video highlighting the landscapes, plants and animals and the wintertime enjoyment opportunities of the NatureHood area of the Saanich Peninsula.
17	Greater Victoria Compost Education Centre	Prepare a report and presentation outlining options for onsite composting and food waste diversion for post-secondary institutions with recommendations for the best options based on waste stream volume, scale, ecological value and economic viability.
18	Habitat for Humanity	To increase diversion of reusable materials from the landfill, survey and analyze the ReStore's donor behaviour and make recommendations for improvement.

19	Raincoast Conservation Foundation	Public Outreach Education Tool for Southern Resident Killer Whale Conservation
20	Rocky Point Bird Observatory	Research and develop education resources for an outreach table display that showcase the effects of climate change on migratory birds and actions residents can take to assist these birds.
21	Shaw Ocean Discovery Centre	Produce an outreach video demonstrating how our actions on land affect the biodiversity of the Salish Sea.
22	World Fisheries Trust	Through consultation with neighbouring First Nations, explore how to incorporate indigenous themes and Traditional Knowledge into Nature House displays and education programs.
23	World Fisheries Trust	Create a strategy to increase visitor attendance to the Nature House considering both programming and publicity.

FOR YOUR REFERENCE - See the detailed descriptions for each project below.

Challenge 1:

Saanich Energy Retrofit Engagement Activities

Organization Name: District of Saanich
Municipality: Saanich
Website for organization: <http://www.saanich.ca/living/climate/>

Help us connect with Saanich residents interested in learning about and/or undertaking energy conservation and retrofit programming.

The first step in community building energy retrofit programs is connecting with interested participants. Most energy retrofit programs and energy retrofit incentives are offered for a limited term. The earlier we reach these people, the more opportunity we have to encourage a retrofit that will lead to lower tCO₂e, increased home comfort and monetary savings.

Your challenge is to help us build a “constituency” as the first step in a community building energy retrofit program. Come up with an engaging strategy to interest people and get their contact information to build this “constituency”. These are people who may be interested in improving the comfort and lowering their heating and energy costs, or who are doing some kind of renovation and can be encouraged to add on energy retrofits such as completing an energy assessment, adding insulation, switching from fossil fuel energy source (oil, propane, NG) to a low emission form (electricity, solar) via a heat pump, passive solar, air sealing, new furnace/heat source, or replacing windows/doors.

Desired format for final project results:

Presentation with whatever materials the group deems appropriate.

Other relevant information that could be shared with students:

- [Climate Action Plan](#)
- <http://www.saanich.ca/living/climate/plan/cap.html>
- Official Community Plan (OCP) <http://www.saanich.ca/living/community/ocp/>
- District of Saanich website <http://www.saanich.ca/>
- Carbon Champion videos <http://www.saanich.ca/living/climate/carbonchamps.html>

Challenge 2: Development Permit Area Guidelines

Organization Name: Township of Esquimalt
Municipality: Esquimalt
Website for organization: <http://www.esquimalt.ca/>

Research and develop draft guidelines for establishing Development Permit Areas that encourage energy, water and GHG reductions in Esquimalt.

A Development Permit Area (DPA) is a set of development regulations pertaining to a specific area as specified by the Official Community Plan. Any proposed building and subdivision within a DPA requires the issuance of a development permit. The authority for local governments to establish DPAs is set out in the Local Government Act, Sections 919.1 and 920. DPAs help local governments plan smart, safe, resilient communities.

Your challenge is to conduct a jurisdictional review of Development Permit Areas (DPAs) among local governments in British Columbia (starting with the capital region) and develop draft guidelines for establishing DPAs that encourage energy, water and GHG reductions in Esquimalt.

- Draft guidelines for establishing a Development Permit Area for climate action in Esquimalt
 - Review literature on development permit area (DPA) guidelines with specific focus on guidelines for addressing climate action
 - Conduct a jurisdictional review of DPAs among local governments in the capital region
 - Which municipalities have DPA guidelines to address energy conservation, water conservation and/or GHG emissions reduction?
 - Identify common and unique elements of DPAs in the region
 - Recommend applicable DPA guidelines for the Township of Esquimalt

Desired format for final project results:

A brief research report with draft Development Permit Area guidelines enclosed.

Other relevant information that could be shared with students:

- Development Permit Areas for Climate Action: A guide for energy conservation, water conservation and GHG emissions reduction ([PDF](#))
- BC Climate Action Toolkit ([Web](#))
- Esquimalt Environment Backgrounder ([PDF](#))
- Esquimalt Bylaw No. 2732 – GHG Targets ([PDF](#))
- Official Community Plan Review ([Web](#))
- Esquimalt Development Backgrounder ([PDF](#))

Challenge 3:

Mobile App for Sustainable Living

Organization Name: Centre for Social and Sustainable Innovation (CSSI), University of Victoria (UVic)
Municipality: Saanich, Oak Bay
Website for organization: <http://www.uvic.ca/gustavson/cssi/>

Develop a mobile app to help students live more sustainably in the region.

Whether it's improving energy efficiency, providing lists of green businesses, reducing food waste or supporting rideshares and exchanges as part of the "sharing" economy, sustainable business practices have a lot to do with encouraging the right behavior. And with more people than ever glued to smartphones, tablets and Web-connected notebook computers, mobile apps and cloud services can influence change for good — and track progress.

Sustainability executives can use mobile or cloud resources to guide decisions or drive green business change within their companies, their customer base or in their own daily activities. We hear every day about apps or services that can improve home energy consumption, help consumers swap equipment or clothing or stuff that they aren't using, or even pass along potential food waste.

CSSI and Gustavson would like to help students live more sustainably. We've created a page on our website with lifestyle tips specifically for students, and we want to make it more comprehensive and far-reaching. We think that an app for mobile devices would achieve those goals.

Your challenge is to develop an app that is accessible and appealing to students and other young people, and that is easily managed (updated) by the UVic staff without requiring coding skills.

Desired format for final project results:

Mobile device app

Other relevant information that could be shared with students:

CSSI has created and hosts a student sustainable-lifestyle page on our website:
<http://www.uvic.ca/gustavson/cssi/student-sustainability/index.php>

More content available upon request.

Challenge 4:

BikeMappers Outreach

Organization Name: BikeMaps.org, University of Victoria (UVic)
Municipality: Saanich, Oak Bay
Website for organization: <https://bikemaps.org/>

Test and report on the effectiveness of different outreach and promotional efforts to increase the number BikeMappers at BikeMaps.org. Help determine key areas of concern for UVic community cyclists.

BikeMaps.org is a research project that collects data from cyclists on locations where they have experienced a collision, a near miss, a hazard, or a theft.

Your challenge is to determine how to best promote BikeMaps.org with the UVic community. We are interested in not only increasing the number of UVic BikeMappers, but in the process gain a better understanding of the effectiveness of a variety of outreach and promotional efforts. Finally, for on-campus planning purposes, we would like to determine where the key areas of concern on campus are for cyclists.

Desired format for final project results:

The final project should include a research report that summarizes the outcomes of various promotional efforts. Website visits, new pins on BikeMaps.org, and social media uptake are suggested metrics to include for determining the effectiveness of the outreach. Challenge participants are strongly encouraged to document all of the outreach efforts with photos or other graphics. With direct assistance and guidance from BikeMaps.org researchers, a map of cycling incident hotspots on the UVic campus should also be included in the research report.

Other relevant information that could be shared with students:

We invite interested challenge participants to visit BikeMaps.org to better understand this citizen-science research project. In addition to generating cycling safety data, results from the challenge project will assist UVic Campus Planning and Sustainability as they work towards their goal of increasing the share of users choosing sustainable transportation options.

Challenge 5:

Business Case for a Lighting Control System

Organization Name: School District #63
Municipality: Saanich
Website for organization: www.sd63.bc.ca

Analyse electricity use from lighting in our schools in order to inform a business case for a lighting control system.

Your challenge is to help School District #63 to better understand the potential for lighting controls in our schools. An analysis of how much electricity is consumed by lighting during periods of low occupancy is desired. Typical school hours are 9 am-3pm but lighting is often still on from 3pm-11 pm for custodial work and community use. However, occupancy is very low (usually only two to ten people in a school in the evening) yet many lights are still on. An analysis of how long the lights are on relative to how often the lit areas are actually occupied is desired. This would essentially allow us to develop a business case for occupancy sensors (or another type of lighting control system).

A possible stretch analysis would be a comparison of light levels in common areas (hallways, lobbies, circulation areas) at different times of the day and with lights on and off, compared to minimum lighting requirements for these areas (lighting levels for common areas are lower than working areas such as classrooms and offices). This analysis would estimate how often lights could be off during the day and form the business case for adding photocell controls to lighting (daylight harvesting).

Desired format for final project results:

A research report would be the desired final project results.

Other relevant information that could be shared with students:

The District consumes over half of its electricity outside of instructional hours (ie no students are in the school). While some energy must be consumed for custodial work, exterior lighting, and for community groups using the school after-hours, this level seems very high. This information has only become available in the last year due to the installation of SmartMeters on our schools. While we know how much energy is consumed after school hours, we do not know what is consuming the energy.

Background data on energy consumption patterns, current levels of technology in the schools and is available for technical guidance.

Challenge 6:

Edible Landscapes at UVic

Organization Name: Sustainability Office, University of Victoria
Municipality: Saanich/Oak Bay
Website for organization: www.uvic.ca/sustainability

Investigate the feasibility of edible landscapes and other food growth options on the UVic campus.

The University of Victoria (UVic) Sustainability Action Plan 2014-19 provides updated goals on strategic topics for campus sustainability that require attention over the next five years and beyond. The plan covers topics from administration and investment to food and waste. Among the over 70 action articulated in the Action Plan is the commitment to “investigate the feasibility of edible landscapes and other food growth options on campus.”

Food is a contributor to the university’s environmental footprint, and growing and purchasing local food is one of the ways of reducing that footprint. Your challenge is to:

- Assess the feasibility for creating edible landscapes at UVic,
- Identify up to 5 potential locations where those landscapes could be piloted, and
- Identify individuals or groups at UVic who would take responsibility to care for the pilot spaces.

Desired format for final project results:

Please provide a written report on the feasibility of edible landscapes on Campus outside the campus community garden. A follow up meeting with the sustainability office on the report is also requested.

Other relevant information that could be shared with students:

The University of Victoria Facilities Management Department maintains the campus environment. Engaging with the Facilities Management Grounds staff would be critical to understand the feasibility of edible landscapes.

Key Facilities Management Department staff contact information and introductions will be provided.

Other Universities have deployed edible landscapes. Please consider reviewing examples such as the University of Massachusetts Amherst (<https://www.umass.edu/sustainability/get-involved/permaculture-initiative>), and the University of Seattle (<https://www.seattleu.edu/grounds/edibles/>)

Challenge 7: Anti-Idling Campaign

Organization Name: Sustainability Office, Camosun College
Municipality: Saanich
Website for organization: <http://camosun.ca/sustainability/>

Design an effective outreach campaign that will result in decreased vehicle idling and increased awareness of its negative effects.

At Camosun College, we believe that sustainability is providing students with the opportunity for life-changing learning while ensuring that our actions benefit the environment and the life it supports, now and for future generations. This vision supports the college's Sustainability Plan (2014-2017) in which a key initiative is to identify and implement opportunities to further reduce the college's environmental impact.

In order to achieve this goal, Camosun recently participated in the Sustainability Tracking, Assessment & Rating System (STARS) program in order to identify areas in which the college can improve their sustainable practices.

One of the most significant challenges identified was the college's need to increase efforts of minimizing atmospheric pollution and protecting outdoor air quality. A large portion of atmospheric pollution at Camosun comes from the idling of vehicles and buses. Vehicle idling directly contributes to climate changes, as carbon dioxide, the principal greenhouse gas that contributes to climate change, is released from vehicle tailpipes. Idling also negatively affects human health as other emissions, such as volatile organic compounds, carbon monoxide and oxides of nitrogen are known to contribute to air pollution and smog¹.

Your challenge is to develop an effective outreach campaign and outreach materials that results in decreased vehicle idling and increased awareness of its negative effects.

[Emission impacts resulting from vehicle idling](#). Natural Resources Canada. 2013-11-25.

Desired format for final project results:

We are looking for an outreach plan and outreach materials.

There are no restrictions in terms of the format for the outreach materials. Students are encouraged to be creative and determine themselves what the most effective format is to deliver the outreach campaign. They may choose to stick with a single format, or produce their project in a variety of formats.

Other relevant information that could be shared with students:

Camosun College has two campuses located in Victoria, BC. The Lansdowne campus is located at 3100 Foul Bay Rd. While the Interurban campus is located at 4461 Interurban Rd. Both campuses have their own unique characteristics which may impact how the outreach campaign is delivered at each campus location.

Information on transit options and habits is available for each campus. This includes – ridership statistics for each campus (% travel by bike, bus, other), free shuttle service schedule and trips, parking permits, campus fleet composition and existing anti-idling signage. CRD also has an anti-idling bylaw.

Lansdowne: 32% of students, faculty and staff get to and from the college by vehicle (single occupancy), 7% get to and from the college by vehicle (2+ occupancy), 36% get to and from the college by bus.

Interurban: 43% of students, faculty and staff get to and from the college by vehicle (single occupancy), 11% get to and from the college by vehicle (2+ occupancy), 36% get to and from the College by bus.

Challenge 8: Source Control Awareness

Organization Name: Environmental Partnerships, CRD
Municipality: All
Website for organization: www.crd.bc.ca/sourcecontrol

Develop an education strategy and create tools to help reverse the trend of local residents believing that what go down the drain is no longer relevant once wastewater treatment is in place for the core area.

Raise regional residents' awareness that their source control actions (limiting or eliminating pollution from going down the drain) are the first step to wastewater treatment regardless of treatment type and level.

When surveyed residents rate source control practices as highly important, ranking them even higher than recycling and their reported actions proactively reduce wastewater contamination. However, recent surveys show an upward trend of the number of residents who believe these practices are not required with wastewater treatment. This is concerning because source control is the first step to wastewater treatment regardless of type (septic or sanitary sewer) or level of wastewater treatment.

Source control plays a significant role in protecting the environment. Contaminants can contribute to blocking or corroding the infrastructure, produce noxious fumes, render bio solids useless or kill beneficial bacteria. Reducing or eliminating contaminants at the source is important because some pollutants are not removed or only partially removed by treatment. Some contaminants can only be removed by very expensive treatment options; while other pollutants can be reactivated or negatively altered with wastewater treatment. Source control focuses on the reduction or elimination of contaminants before they enter the sewer system rather than treating them after they have been mixed with other wastes.

Desired format for final project results:

- Research report including what others (e.g. not-for profits, governments, industries) do to raise awareness of source control best management practices, influences for behaviour change (e.g. community-based social marketing)
- Tools for behaviour change (e.g. video, brochure, prompts, other)

Other relevant information that could be shared with students:

The CRD is responsible for treating the region's wastewater. In collaboration with local municipalities, electoral areas and industry, the CRD develops local services to manage sewage infrastructure and septic systems in the region. CRD services also focus on education, environmental monitoring and enforcement to help protect local streams, creeks, the ocean and our environment.

The Regional Source Control program is one of seven liquid waste management programs that form part of the CRD's Core Liquid Waste Management Plan. It is a pollution prevention initiative aimed at reducing the amount of contaminants that industry, businesses, institutions and households discharge into the district's sanitary sewer systems and has been active since the adoption of the CRD's Sewer Use Bylaw ([Bylaw 2922](#)) in August 1994.

The bylaw specifies the types of wastes that are either **prohibited** or **restricted** from being discharged to the sanitary sewer and the various conditions under which facilities must operate if they discharge waste into the sanitary sewer. To prevent pollution, CRD source control inspectors work directly with businesses providing education, monitoring and enforcement services, however, with residents education is the primary tool to promote and sustain stewardship.

Similarly, the regional Onsite Program aims to protect our local water quality. Septic systems are an important Wastewater Treatment option for homeowners in the capital region. They provide household disposal of wastewater where sewers are either unavailable or too expensive. Currently, septic systems serve about 26, 000 households in our region.

The key difference in being connected to the sanitary sewer system and being connected to a septic system is that the homeowner is completely responsible for operation and maintenance of their onsite wastewater treatment system. This is no small feat. Homeowners need to know where all their system components are located and how the system treats wastewater before discharging to the environment. Most importantly, homeowners need to ensure regular maintenance and monitoring of their system.

Although there are separate programs and bylaws for septic and sanitary sewer systems, any of the pollution prevention actions and education is shared.

Current Educational Tools & Resources

- [Septic System Resources](#)
- [Septic Savvy Workshops](#)
- [Septic Tips for Home Buyers and Sellers](#)
- [Clean water begins at home](#)
- [Clean Green Recipes](#)
- Videos
 - [Down the Drain](#) (sanitary sewer)
 - [Septic Systems](#)
 - [Pollution Prevention for Automotive Shops](#)
 - [Pollution Prevention for Food Industry](#)

Past Campaigns

- [Slogan Master](#)
- [Holiday Fats, Oils & Grease](#)
- [Be Septic Savvy This Summer](#)
- [My Green School Plan](#)

Webpages

- [Sewers, Wastewater and Septic](#)
- [Sanitary sewer](#)
- [Septic Systems](#)

Documents and Reports

- Residential Survey results (available on request)
- [Annual Reports and Five Year Review](#)

Challenge 9: Green Infrastructure Inventory

Organization Name: Environmental Protection, CRD
Municipality: All
Website for organization: www.crd.bc.ca/watersheds

Create a photo and data inventory of green infrastructure to update the CRD's natural areas atlas.

The Integrated Watershed Management (IWM) program promotes green infrastructure techniques for sustainably managing rainwater to protect watershed health and the nearshore marine environment. Your challenge is to:

- Update the [current online inventory](#) of examples of innovative rainwater management techniques in the region, including rain gardens, rainwater harvesting, bio-swales, wetlands, permeable paving, green roofs and sustainable developments, etc. Examples of sites could include Dockside Green, the Atrium, University of Victoria, etc. Challenge requires students to collect information about each site, take photos and map the location. The information would be posted on the CRD website, and used to promote green infrastructure in the region.
- Expand the sites to include restoration sites. (i.e. Bowker Creek behind OBHS)
- Gather the new sites and update the current sites with GIS points so that links can be incorporated into the CRD Atlas.

Desired format for final project results:

- Data to be submitted in digital format and displayed in Excel for easy uploading/integration into the CRD Atlas.
- Any new sites will also be requested in a Word document in similar content and format to current on-line inventory.
- Photos in high resolution JPEG.
- Site locations mapped in ArcGIS, including a PDF map.

Other relevant information that could be shared with students:

- Site locations across the CRD.
- Site information is also available on municipal websites

Challenge 10:

Illegal Dumping

Organization Name: Environmental Resource Management, CRD
Municipality: capital region
Website for organization: www.crd.bc.ca/recycle

Research and pilot a campaign on how to apply the 3Rs of Reduce, Reuse, Recycle to deal with all your 'stuff' at the end of the school year.

The Environmental Resource Management administers and manages all municipal solid waste disposal for the Capital Region at Hartland landfill, as well as waste reduction and recycling programs. Close to 50% of the solid waste generated in the region has been diverted from disposal, with the remaining 50% primarily landfilled at Hartland landfill. Each year over 134,000 tonnes of garbage is landfilled in an environmentally responsible manner.

Environmental Resource Management has a mandate of focusing on the environmental future, and is responsible for the planning, developing, and application of systems that will best ensure an integrated and beneficial use and reuse of our resources- some of which may now be seen as waste. Instead of disposing waste, the CRD is focused on utilizing waste as a commodity for beneficial reuse. This includes a focus toward zero waste in our landfill, bio solids recycling, methane gas capture, compost and organics processing initiatives, and other energy from waste opportunities.

The amount of illegal dumping and abandoned waste activity occurring in the region is significant and research has shown that this activity is elevated at the end of the school year with post-secondary students leaving town.

Your challenge is to research and test a campaign on how to apply the 3Rs of Reduce, Reuse, Recycle to deal with all your 'stuff' at the end of the school year.

Desired format for final project results:

Final written report should include results of research and analysis of campaign and its impact on changing behaviour. Presentation optional.

Other relevant information that could be shared with students:

Research on illegal dumping, including research showing this activity is elevated at the end of the school year with post-secondary students leaving town, is available On our website.

- <https://www.crd.bc.ca/service/waste-recycling/illegal-dumping>

Challenge 11:

Multi-Modal Transportation Festival

Organization Name: Regional Planning, CRD
Municipality: capital region
Website for organization: www.crd.bc.ca/planning

Plan a multi-modal transportation festival to educate, encourage, motivate residents to cycle walk take transit and reduce single occupant use.

The CRD would like to organize and execute a multi-modal transportation exposition or festival. The proposed event would be held between June and October 2016 and should be designed to educate, encourage, motivate and inspire residents to cycle, walk, take transit and generally reduce single occupant vehicle use for commuting and personal travel.

While the festival would be open to all residents, there is a particular interest in attracting and supporting children/youth/families as well as seniors, newcomers and immigrants. The CRD has a maximum budget of \$5,000 for this event.

We would like a team of students to research, develop and propose ideas for various aspects of this event including:

Other examples of similar or related events and lessons learned (BC):

- Potential names for the event
- Potential dates and locations for the event (day, time, costs, benefits, drawbacks)
- One day or multi-day day event?
- Suggested content and programming (speakers, presentations, workshops, demonstrations – basically what would happen at the event. We have a particular interest in looking at ways we can “program” the event to attract specific audiences who we can count on to attend.)
- Suggested partners to invite (potential vendors who would be interested in attending such an event and having an informational display – for example, BC Transit, MODO car share, local bike shops, advocacy organizations etc)
- Suggested promotional strategies or marketing efforts to attract participants

The Students are not expected to implement the event, rather help us do some of the legwork and research to plan the event.

Desired format for final project results:

A report and presentation to CRD staff.

Other relevant information that could be shared with students:

This effort would aim to support the SOFT E’s associated with sustainable transportation (encouragement, education, enforcement and evaluation). Students can learn more about the region’s objectives to increase the use of active & multi-modal transportation by viewing two of our major plans:

- a) [2014 Regional Transportation Plan](#)
- b) [2011 Pedestrian & Cycling Master Plan](#)

A reminder that this event would be focused on the entire capital region – from Sooke to Victoria to Sidney and everywhere in between.

Challenge 12:

Electricity Outreach Materials

Organization Name: BC Sustainable Energy Association Victoria Chapter
Municipality: capital region
Website for organization: <http://www.bcsea.org/chapters/victoria>

Develop engaging public outreach materials explaining how electricity is measured, produced and used for use at community events.

How can we increase electricity (and energy) literacy? To answer this question, your challenge is to create engaging posters, quizzes, and hands-on exhibits for community events explaining how to measure electrical energy, and understand how much we use, and how it is produced.

Develop materials to explain how we measure energy with kilowatts and kilowatt-hours, how much different kinds of home appliances use, and how people can track their own energy use on BC Hydro's MyHydro website.

They could also illustrate magnitudes of power production – from a solar panel, a wind turbine, a run-of-river project, sample hydro-electric dams - and put these in context of total electrical production (or demand) in BC, and perhaps total energy use of all types in BC.

We are all receiving frequent messages to save energy and reduce our carbon footprints, but the conversation is difficult for people who do not know how much energy they are using. The basic units of electricity are kilowatts and kilowatt-hours, and although the concepts are simple, most people don't understand what they are. They also have no idea whether a toaster uses more power than a shower or computer. By comparison, many understand a litre of gasoline from watching the meter filling their cars.

BCSEA's Victoria Chapter is invited to many public events each year, with an invitation to set up a table or booth space with a couple of volunteers. This could be an excellent opportunity to educate people about how to talk about electricity use, how much electricity different household components use, and how it compares to energy use in other ways – cars, buses, jets, or maybe food production. They could engage people with questions, puzzles, and calculations using real-world familiar examples.

These materials could be integrated with the BCSEA Victoria Chapter's schools program, and possibly with our province-wide Climate Change Showdown schools program.

Desired format for final project results:

Engaging posters, quizzes, hands-on exhibits for community events explaining how to measure electrical energy, and understand how much we use, and how it is produced.

Other relevant information that could be shared with students:

- BC Hydro Powersmart
- Fortis BC rebates
- Examples of materials created to date (available upon request)

Challenge 13:**Energy Efficient Building Incentives Research**

Organization Name: Canadian Passive House Institute West
Municipality: capital region
Website for organization: <http://www.passivehouse.ca/>

Research and present on successful energy-efficient building incentives that are currently proposed and/or implemented by local and senior levels of government in Canada.

CanPHI West is a non-profit organisation that works to provide Canadians with the knowledge, tools, networks and confidence to design and construct buildings to meet the Passive House Standard.

The term passive house refers to a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. Local, Provincial and Federal governments play a key role in reducing barriers and building in incentives for innovative, energy efficient design.

Your challenge is to research incentive initiatives being proposed and implemented by policy makers and planners at varying levels of governance in Canada that support and promote energy efficient buildings. We are specifically interested in initiatives that support and promote the construction of Passive House buildings.

Desired format for final project results:

A short research report, accompanied by a power point presentation to staff. If this is selected as a winning project, students will have the opportunity to present to the Canadian Passive House Institute West Board (comprised of noted Architects, Engineers and Developers).

Other relevant information that could be shared with students:

We will supply example initiatives that we are aware of as well as background on Passive House and energy efficient buildings. You may also look at similar lists developed for energy rebates for businesses:

Challenge 14: Social Media Plan for Students

Organization Name: Creative United for the Planet
Municipality: capital region
Website for organization: <http://creativelyunited.org/>

Develop a social media and advertising plan to encourage students (grade 7 through post-secondary) to attend the Creatively United for the Planet Festival (Late April 2016)

Creatively United for the Planet is a two-day solution summit April 22-23, 2016 to celebrate local leadership in sustainability and resiliency. For the first time, Creatively United for the Planet is being hosted at the new Royal Bay High School in Colwood.

Creatively United requires a youth engagement strategy – focused on promoting, recruiting and involving youth, grades 7 to post-secondary to attend and participate in Creatively United.

Youth engagement is the concept and practice of meaningfully engaging youth in decisions that affect them, their peers and their communities. Youth engagement ensures that young people become an integral part of the work of organizations and communities and that their voices help shape the future.

Through youth engagement, youth are no longer seen as recipients of services but as citizens that are actively engaged and involved in the issues and processes that affect them. Engagement is more than just a dialogue between adults and young people; it is about adults and youth working together as equal partners to make decisions and create change.

Organizations practicing youth engagement will benefit from the expertise and experiences of youth and will be able to do a better job of creating and sustaining the services, opportunities and supports that young people need for healthy growth and development.

Desired format for final project results:

Format requested is a short youth engagement strategy with practical strategies for youth engagement (eg.'s, program report and accompanying materials - social media plan, advertising plan, etc).

Other relevant information that could be shared with students:

- Videos of past Creatively United for the Planet festivals can be viewed on the website at www.creativelyunited.org
- The 2016 event (unlike previous years) will take place primarily indoors, with access to outdoors, and have numerous short participatory/interactive workshops; a tradeshow (April 23), plus arts, entertainment and local food as part of the event. Leadership will be the theme with an exploration of what creates healthy communities. We will address this through art, music, entertainment, displays, lectures, videos, interactive talks and workshops.
- Key organizers will be encouraged to attend occasional Creatively United for the Planet planning meetings and provide progress updates
- Creatively United for the Planet's own green practices and initiatives result in the event finishing with less than two bags of garbage (after composting and recycling) with an average of 2,000 visitors.
- www.creativelyunited.org
- http://www.mcf.gov.bc.ca/youth_engagement/pdf/yet_resource_guide.pdf

Challenge 15:**Youth Sustainability Workshop Development**

Organization Name: Creative United for the Planet
Municipality: capital region
Website for organization: <http://creativelyunited.org/>

Design and lead your own sustainability workshop(s) or educational display or activity on the topic of your choice at the 5th Annual Creatively United Earth Week Festival.

Creatively United for the Planet is a two-day solution summit April 22-23, 2016 to celebrate local leadership in sustainability and resiliency. For the first time, Creatively United for the Planet is being hosted at the new Royal Bay High School in Colwood.

Creatively United offers an opportunity for post-secondary students to develop their leadership skills by creating and leading their own sustainability workshop(s) at the 5th Annual Creatively United Earth Week Festival, April 22-23, 2016. Participants will be given their own one-hour session(s) on the topic of their choice as it relates to sustainability. During this hour, workshop attendees will be encouraged to participate in an activity or discussion around sustainability. The use of art, music, visuals, white boards, etc. is encouraged.

Another option is to create an educational display or activity to be enjoyed by the public during the event vs leading a workshop.

Desired format for final project results:

A workshop, presentation or educational display/activity.

Other relevant information that could be shared with students:

- Videos of past Creatively United for the Planet festivals
- Information/ideas from previous Creatively United for the Planet events
- Invitations to attend Creatively United for the Planet planning meetings and receive guidance
- Information about Creatively United for the Planet's own green practices and initiatives, displaying "walk the walk"
- www.creativelyunited.org
- [http://www.mcf.gov.bc.ca/youth_engagement/pdf/et_resource_guide.pdf](http://www.mcf.gov.bc.ca/youth_engagement/pdf/yet_resource_guide.pdf)

Challenge 16:

Wintertime Harbour Enjoyment Video

Organization Name: Friends of Shoal Harbour Society
Municipality: Sidney and North Saanich
Website for organization: <https://shoalharbour.wordpress.com/>

Develop a video highlighting the landscapes, plants and animals and the wintertime enjoyment opportunities of the NatureHood area of the Saanich Peninsula.

This project seeks to raise awareness of the beaches, trails and shorelines of the Saanich Peninsula, to promote their enjoyment, beauty and refreshing properties in all seasons. The Saanich Peninsula is a newly designated national “NatureHood” region by Nature Canada. (<http://naturecanada.ca/what-we-do/naturehood/>). By highlighting people’s wintertime uses of the Peninsula through an entertaining video, the Friends of Shoal Harbour (FOSH) hope to celebrate and promote the enjoyment of natural spaces such as Shoal Harbour Migratory Bird Sanctuary, the second oldest sanctuary of its kind in Canada.

The video would highlight the people who spend time outdoors in all weathers in the winter, and explore their favorite spots, any particulars of their walking habits, what benefits they derive from their excursions, and their feelings about the landscape and the creatures that inhabit it. The students participating in the project would act as interviewers, videographers, and photographers of these “winter walkers”. The overall goal of the project is to celebrate the NatureHood of the Saanich Peninsula and the landscapes, plants and animals who inhabit it, demonstrate the benefits of enjoying our natural surroundings in all seasons, and emphasize the importance of making space for nature in all of our built environments.

Process:

Student interviewers would develop a simple template to approach people outdoors in nature that explains the nature of the project, asks their permission to interview them, asks permission to video the interview and/or take some still photographs, reassure the interviewees as to their privacy and the goal of the project, and request their final consent prior to completion of the project. Students would have free rein as to the creative, artistic and poetic elements of the video, keeping in mind the project’s goals of awareness and celebration.

Regarding locale, our preference would be for students to explore and film users of the northern portion of the Saanich Peninsula, from Brentwood Bay on the west side around to Saanichton Bay on the east side. However, locations in Saanich and Victoria may be more accessible to students and would also be suitable.

Desired format for final project results:

The end result of the project would be a short video that would include a selection of interviews as well as video footage and still photographs of the natural surroundings. The video would be used by FOSH to raise awareness of the many beautiful natural places on the Saanich Peninsula, highlight the many benefits derived from spending time in nature in all seasons and celebrate the importance of nearby nature to urban centres.

Other relevant information that could be shared with students:

If this proposal is accepted, we would like to hold a preliminary meeting(s) with the student team to develop an action plan together. In addition, we will provide the team with background information on specific bird habitats, beach and trail access points, key locations for other wildlife viewing, winter species of wildlife and plant species on the Saanich peninsula, and key contacts to get them started on the interviews.

Challenge 17:

Onsite Composting Analysis

Organization Name: Greater Victoria Compost Education Centre
Municipality: Victoria / capital region
Website for organization: <http://compost.bc.ca/>

Prepare a report and presentation outlining options for onsite composting and food waste diversion for post-secondary institutions with recommendations for the best options based on waste stream volume, scale, ecological value and economic viability.

Universities and Colleges produce large volumes of food waste from cafeterias, lunch rooms and student residences. While some institutions have implemented successful food waste sorting and collection stations on campus, the general trend has been to have the food waste collected by a private company and hauled off-site to an industrial composting facility. The most ecological and long-term economical solution to diverting food waste from the landfill and capturing the valuable resource from organic waste, is to develop and implement an on-site composting, gasification or food digestion system. Many options exist on different spatial and economic scales so there is scope to research these technologies and recommend the best option based on school property size, student population and waste stream volume.

Desired format for final project results:

A report and PowerPoint Presentation outlining options for on-site composting and food waste diversion for Royal Roads/UVIC/Camosun College with recommendations for the best options based on waste stream volume, scale, ecological value and economic viability.

Other relevant information that could be shared with students:

The Compost Education Centre has a wide range of resources on composting technologies, compost and soil science and waste reduction tools. Your supervisor is a certified Compost Facility Operator and Soil Ecologist with many professional contacts in the commercial composting industry.

Challenge 18:

Donor Behaviour Survey

Organization Name: Habitat for Humanity
Municipality: Victoria / Langford
Website for organization: <http://www.habitatvictoria.com/>

To increase diversion of reusable materials from the landfill, survey and analyze the ReStore's donor behaviour and make recommendations for improvement.

Habitat for Humanity Victoria is a local charity mobilizing volunteers and community partners to build affordable housing and promote homeownership as a means to breaking the cycle of poverty. Habitat Victoria builds safe, decent, affordable homes and sells them to selected families who need a 'hand up' to qualify for a mortgage.

The more donors we have the more material we can divert away from landfill to be re-used and recycled. Diversion of waste from the landfill builds resiliency and reduces the impacts from waste on climate change.

The two ReStores, in Langford and Victoria support Habitat's vision by providing funds to the charity and its building activity through the sale of new and gently used building supplies, furniture, appliances and much more. Everything we sell is donated by businesses and the public. We actively divert other peoples' waste away from landfill for re-use and recycling and we provide a source of affordable products to lower income families for their homes. Together, operating with a small staff and a significant volunteer base our positive impact spans individual families, local communities, businesses in Victoria and the wider environment.

One of the most valuable assets for any not for profit organization is its donors. It is far more costly to continually recruit new donors than it is to retain existing ones. Repeat donors tend to get more involved in an organizations work, become community ambassadors who recruit others and potentially volunteer directly within the organization. In order to retain donors we need to understand them better. We do this by establishing what our retention rate is and how we can better serve our donors, to make sure they come back to us again and again.

Your challenge is to:

- establish what our residential donor retention rate is.
- determine our geographic donor base i.e. how far are people currently willing to travel to donate to us for each of our two stores. This is particularly relevant for the Victoria store which has only been open since August 2015.
- design and complete a survey that will tell us what our donor experience is like during collections and at the back door for drop off donations and find out if there are areas where we can improve to try and turn one time donors into repeat donors.
- determine how the donor heard of us, are they responding to word of mouth, advertising or another source like a building contractor. To understand why people donate to us and what feedback they want to receive from us about how their donations help our organisation i.e. what makes them feel valued so they are happy with their experience and will donate again.

Desired format for final project results:

To complete a report with statistical analysis and interpretation of the results gained from:

- face to face back door surveys at each store of drop off customers
- phone survey of pick up customers after service has been completed
- desktop analysis of current vs historical data on collections kept by the organisation

Outcomes of the report should be presented in summary to the Habitat/Restore Team.

Other relevant information that could be shared with students:

Contacts to support this project will be the ReStore Manager and the ReStore Procurement Officer.

Historical and current collection data will be provided for the desktop analysis along with support to design the surveys.

Challenge 19:**Public Outreach Education Tool for Southern Resident Killer Whale Conservation**

Organization Name: Raincoast Conservation Foundation
Municipality: Sidney
Website for organization: www.raincoast.org

To improve public awareness, produce an educational tool to aid understanding of potential measures that can help ensure Southern Resident Killer Whale survival.

Raincoast Conservation Foundation (Raincoast) is a team of conservationists and scientists empowered by our research to protect the lands, waters and wildlife of coastal British Columbia. We use rigorous, peer reviewed science and grassroots activism to further our conservation objectives. As an evidence based, conservation science organization (science ENGO), that operates a research lab, research field station and are search/sailing vessel, we are unique in Canada.

Raincoast is concerned with the ongoing plight of the endangered population of Southern Resident Killer Whales (SRKW) in the Salish Sea. These whales face several threats, but to date there has been little action to address them, to assure the whales' survival. From a collaborative survey completed this summer by the RedFish School of Change and Raincoast, it is clear that there is little public awareness of the current situation in regards to the negative ways that human actions impact these whales. This lack of awareness appears to be contributing to a muted response on the part of citizens and governments alike, to taking the necessary measures that are required to ensure that this population does not become extinct within our lifetimes.

The purpose of this project is to create an outreach communication tool that will help to educate the public, ideally through innovative and creative means, to share the situation, science, and convey the high level measures that would aid SRKW survival.

We hope you'll work with us!

Desired format for final project results:

We'd like to have a final project format that is creative, engaging, and that can be easily shared online with different audiences, from public to decision-makers alike. The final format of the project will depend very much on the creativity and skill set of the team engaged, but could include science communication and engaging visuals. The final product would be engaging and educational, while professional and clear in it's messaging to reflect the potential solutions, and the seriousness of the subject matter. The choice of media- web - video - or other form suitable for web delivery - will also likely depend on the team putting together a solid work plan to accomplish the collective vision within the time allowable.

Other relevant information that could be shared with students:

Raincoast could provide a science briefing on our work and the extensive body of research that exists. This could include an overview of the Canadian federal government's recovery strategy, and an explanation of our recent Southern Resident Killer Whale population viability assessment, carried out by a team of scientists with expertise in various aspects of killer whale population demographics, threats and survival.

In addition, we can share the results of the survey we carried out this past summer with students from the RedFish School of Change, and other relevant research materials.

Additionally, significant volumes of information are available on our website, and on other governmental and NGO websites, such as (but not limited to) the following:

- http://www.sararegistry.gc.ca/document/default_e.cfm?documentID=1341

- http://www.nwfsc.noaa.gov/news/features/killer_whale_report/index.cfm
- www.raincoast.org/2015/05/rcf-neb-evidence-tmx/
- www.dfo-mpo.gc.ca/species-especies/species-especies/killerWhalesouth-PAC-NE-epaulardsud-eng.htm
- www.westcoast.fisheries.noaa.gov/protected_species/marine_mammals/killer_whale/critical_habitat.html
- http://www.nwfsc.noaa.gov/news/features/killer_whale_report/pdfs/bigreport62514.pdf
- <http://www.nmfs.noaa.gov/pr/species/mammals/whales/killer-whale.html>
- <http://www.bewhalewise.org/>
- <http://whalemuseum.org/pages/soundwatch-boater-education-program>
- <http://cetussociety.org/>
- <http://thewhailetrail.org/>

Challenge 20:

Effects of Climate Change of Migratory Birds Display Materials

Organization Name: Rocky Point Bird Observatory
Municipality: Victoria
Website for organization: <http://www.rpbo.org/>

Research and develop education resources for an outreach table display that showcase the effects of climate change on migratory birds and actions residents can take to assist these birds.

Your challenge is to research and develop education resources for an outreach table display that showcase the effects of climate change on migratory birds and actions residents can take to assist these birds.

Rocky Point Bird Observatory seeks to influence and inform conservation and ecological management practices of migratory birds in western North America through monitoring, scientific research and public education.

RPBO is currently expanding their public education offerings. Starting with a Grade 7 fall field trip program on the topics of migrating songbirds and ecological monitoring, we are now developing programs to suit Grades 1 – 7, as well as developing programs that can be done on school grounds, to eliminate the transportation costs associated with a field trip at a remote location.

It is the intention of RPBO to create versatile educational resources that can be used in a variety of educational settings (classrooms, community events, etc.), and materials that deal specifically with local species that CRD residents may find in their own backyards. Climate change affects many bird species that migrate through southern Vancouver Island every year. Many of the bird species that migrate through southern Vancouver Island have summer breeding ranges in the Arctic or boreal forests, making them extremely vulnerable to climate change. As ranges shift and contract in response to climate change, many bird species are put under increasing pressures. Luckily, there are many actions on an individual's level that can be done to support our birds.

We wish to partner with students who have an interest in species conservation and environmental outreach to help us create materials for an educational event table illustrating how birds migrating through southern Vancouver Island are affected by climate change, and the simple actions community members can make to assist these birds (for example, reducing pesticide use, or fitting your cat with a bell to wear outside to prevent them from catching birds).

Ideas to consider:

- How can we create eye-catching material catered to a wide audience – pictures, maps, etc.?
- What are some recognizable local bird species that could be negatively affected by climate change?
- How can we make our material suitable for all ages? Are there props or activity sheets we can use?

Desired format for final project results:

- Brochure outlining how climate change affects migrating birds, and the actions residents can take to support avian species conservation (data file required)
- Poster board that can be set up at an event table
- Excel sheet outlining budget for any props that would need to be purchased
- 1 – 2 page report outlining table setup and background information needed for staff manning table

Other relevant information that could be shared with students:

- Old progress reports from previous education programs
- List of biological specimens and props owned by RPBO
- List of relevant links to useful background information
- Pictures

Challenge 21:**Residential Actions Impacts of Salish Sea Video**

Organization Name: Shaw Ocean Discovery Centre
Municipality: Sidney
Website for organization: www.oceandiscovery.ca

Produce an outreach video demonstrating how our actions on land affect the biodiversity of the Salish Sea.

The Shaw Ocean Discovery Centre (SODC) requires a visual and dynamic presentation demonstrating how everyday actions can affect the health of the Salish Sea watershed. Inspired by our updated mission statement, “to create experiences that engage people to learn about, explore and conserve the Salish Sea Bioregion – its wildlife, waters, land, culture, and people” and the idea everyone can make a difference, the presentation should highlight lifestyle changes (actions) in the home, work, and community that promote water conservation, energy efficiency and waste reduction and their relevance to the health of the biodiversity of the Salish Sea.

This video will be shared in educational programming, during outreach events, on social media and our website.

Desired format for final project results:

Format requested is a short—3-5 min—video demonstrating the connection between residential buildings and the surrounding watershed; coverage to include citizens demonstrating healthy (and/or unhealthy) actions, imagery of watershed components—rivers, streams creeks, forest/green spaces, ocean—and watershed species, along with take action initiatives or challenges. The video can include still images mixed with moving video clips and could be set to a compilation of music, nature sounds, verbal communication and written text overlaid on images.

Other relevant information that could be shared with students:

- Still photos of Salish Sea species
- Access to aquarium for filming of habitats—eelgrass, kelp forests, etc.
- Information/ideas from our previous CRD partnered “Our Ocean is Our Home” exhibit
- Suggested list of local locations for taking photos and video of storm drains, creeks and other watershed components
- Information about the SODC’s own green practices and initiatives, displaying “walk the walk” (may be incorporated into video)

Challenge 22: Including Indigenous Themes into the Nature House

Organization Name: World Fisheries Trust
Municipality: Esquimalt
Website for organization: www.worldfish.org

Through consultation with neighbouring First Nations, explore how to incorporate indigenous themes and Traditional Knowledge into Nature House displays and education programs.

In 2008, WFT, in partnership with the town of Esquimalt and other local NGOs, opened the Gorge Waterway Nature House, a local community hub of marine and environmental education. Its aim has been to educate the public and key stakeholders about environmental issues and stewardship, using protection of the Gorge, its ecosystems, and urban environments as the focal point. The Nature House has attracted thousands of visitors since its opening, and was renovated in 2012 to incorporate a touch tank of live, local marine animals, a 3-D interactive model of the surrounding watershed, and various activities and displays providing hands-on learning experience about local terrestrial and aquatic ecosystems. Formal school programs are run out of the Nature House on demand, while it is open to the public during much of the week during the summer, and generally on weekends during the fall and winter.

While WFT has been successful in increasing traffic through the Nature House over the years and developing an array of educational programs, we are now looking to further develop the profile and capacity of the Nature House. As a first step, we wish to partner with students who have an interest in public outreach and education, environmental conservation, and indigenous engagement to further incorporate indigenous themes and Traditional Knowledge into Nature House displays and education programs. WFT intends to implement accepted suggestions from the development plan in 2016.

The Plan should include:

- proposals to incorporate indigenous themes and traditional knowledge into the Nature House space and educational programs through consultation with the Songhees and Esquimalt Nations;
- budgets associated with the above aims.

The work would be done in conjunction with WFT staff and volunteers to provide necessary networking, history, and resources as needed.

Desired format for final project results:

A formal report and presentation.

Other relevant information that could be shared with students:

Background on World Fisheries Trust and the Gorge Watershed: World Fisheries Trust (WFT) is a non-profit organization, established in 1995 and based in Victoria, dedicated to the equitable and sustainable use and conservation of aquatic biodiversity in Canada and internationally. Locally, WFT offers an integrated selection of educational outreach programs, including Seaquaria in Schools, in-school and field programs, the Gorge Waterway Nature House and an Eco Learning Hive that connects local educators with environmental-based learning opportunities.

The Gorge Waterway, known as 'The Gorge', is an urban marine waterway connecting Victoria Harbour to Portage Inlet. A number of urban streams make up the watershed, including the Colquitz Creek. The Gorge has a rich cultural history as an important spiritual place and food-gathering area for First Nations, a recreational hotspot for colonial residents from the early to mid 1900s, an open sewer for a period of time, and again as a recreational hotspot in recent years.

Biologically, it is home to a wide variety of marine and avian wildlife and plants, including endangered native oysters, local stocks of Coho salmon, sea—run cutthroat trout, a distinct herring stock, and a variety of invasive species.

WFT, and a network of other non-profits and community stewards, are working hard to monitor the Gorge ecosystem and offer educational outreach programs to raise awareness on the importance of environmental conservation. Many of those educational programs take place in the Gorge Waterway Nature House, readily accessible to the local urban residents – even those with limited resources. This Challenge thus has considerable potential to make a significant impact on both cultural and environmental stewardship of people – specifically how to live positively with nature and our neighbours.

Additional resources provided:

- records of correspondence with members of the Songhees and Esquimalt Nations who have expressed interest in Nature House programming and development
- Nature House Progress and summary reports from 2010 – 2014
- Nature House Business Plans from 2010 – 2014
- select financial records for the Nature House

Challenge 23:

Strategy to Increase Visitor Attendance to the Nature House

Organization Name: World Fisheries Trust
Municipality: Esquimalt
Website for organization: www.worldfish.org

Develop a strategy to raise awareness of the Nature House and increase the number of visitors during public hours.

In 2008, WFT, in partnership with the town of Esquimalt and other local NGOs, opened the Gorge Waterway Nature House, a local community hub of marine and environmental education. Its aim has been to educate the public and key stakeholders about environmental issues and stewardship, using protection of the Gorge, its ecosystems, and urban environments as the focal point. The Nature House has attracted thousands of visitors since its opening, and was renovated in 2012 to incorporate a touch tank of live, local marine animals, a 3-D interactive model of the surrounding watershed, and various activities and displays providing hands-on learning experience about local terrestrial and aquatic ecosystems. Formal school programs are run out of the Nature House on demand, while it is open to the public during much of the week during the summer, and generally on weekends during the fall and winter.

While WFT has been successful in increasing traffic through the Nature House over the years and developing an array of educational programs, we are now looking to further develop the profile and capacity of the Nature House. As a first step, we wish to partner with students who have an interest in public outreach and education, environmental conservation, and indigenous engagement to further incorporate indigenous themes and Traditional Knowledge into Nature House displays and education programs. WFT intends to implement accepted suggestions from the development plan in 2016.

The strategy could include:

- suggestions for regularly scheduled events and activities that involve a wide range of participants;
- public awareness of the Nature House and its activities through increased media coverage;
- proposals to improve engagement and co-ordination with other agencies involved in the environmental stewardship of the Gorge;
- ideas for new, or improvements to existing, Nature House programs in order to maximize use of Nature House space and diversity of the educational portfolio;
- proposals to raise awareness of the Gorge's native plant and animal species, and their importance to our local ecosystems;
- methods to more effectively recruit and coordinate long-term volunteers to ensure the extended viability of the Nature House; and
- budgets associated with the above aims.

The work would be done in conjunction with WFT staff and volunteers to provide necessary networking, history, and resources as needed.

Desired format for final project results:

A formal report and presentation.

Other relevant information that could be shared with students:

Background on World Fisheries Trust and the Gorge Watershed: World Fisheries Trust (WFT) is a non-profit organization, established in 1995 and based in Victoria, dedicated to the equitable and sustainable use and conservation of aquatic biodiversity in Canada and internationally. Locally, WFT offers an integrated selection of educational outreach programs, including Seaquaria in Schools, in-school and field programs, the Gorge Waterway Nature House and an Eco Learning Hive that connects local educators with environmental-based learning opportunities.

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- Nature House Progress and summary reports from 2010 – 2014
- Nature House Business Plans from 2010 – 2014
- Select financial records for the Nature House