

2021-22











The 2021-2022 school year marked the return of the VSB's Sustainability Grant program after a hiatus due to the pandemic. Students and teachers were excited to jump back in to planning and delivering sustainability projects for their schools and communities.

Offered to both Secondary and Elementary schools, grants of up to \$1000 and \$500 respectively were available for sustainability projects that fall into four of the themes outlined in the <u>VSB Environmental Sustainability Plan</u>: Sustainability in Education, Green Spaces, Sustainable Transportation, and Resource Conservation and Climate Change. Secondary school projects are student-led, and elementary school projects are teacher led with opportunity for student participation. A total of \$31,100 was distributed to 48 schools in support of 49 projects.

The sustainability grant program, by design, follows the Plan's implementation principles:

- Education is our leverage Sustainability projects should support and enrich our students' education.
- We follow student and teacher interests Sustainability projects will be guided by student and educator needs and interests.
- We make our efforts lasting Sustainability projects will endeavor to create a lasting impact on the school community and culture of sustainability.

We know that students, educators, and schools are engaged in the work of sustainability already. The grant program is a way for us to support this good work, and to learn more about priority areas for students and educators. This helps inform the District sustainability team's efforts.

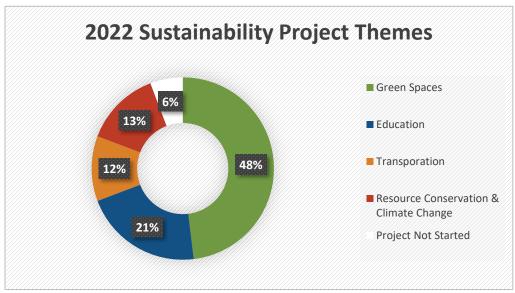


Figure 1: Distribution of projects by theme area

Project Summaries:

School	Project Description
Beaconsfield Elementary	Garden equipment for indoor growing
Britannia Secondary	Bike project – bike rack repair, bike to school week, and
·	bike repair cafe
Brock Elementary	Nature Sketch program
Byng Secondary	Take-out container recycling program & elementary school
	climate education presentation
Carleton/Cunningham Elementary	Bike kitchen (bike tune-ups)
Champlain Heights Annex	Sensory garden plants and equipment
Churchill Secondary	Eco-workshop series
Churchill Secondary	Zero emission mission – reducing commute carbon
·	footprint
Crosstown Elementary	Zero waste awareness campaign for Earth Day
Dickens Elementary	Roof top garden improvements
Fraser Elementary	Bike rack installation
Grandview Elementary	Outdoor learning supplies
Grenfell Elementary	Improving garden accessibility
Hastings Elementary	Scooter racks
Jamieson Elementary	Garden box installation
John Oliver Secondary	Garden rejuvenation & pollinator plants
John Oliver Secondary	Sustainability week awareness campaign
Kerrisdale Elementary	Beeswax wraps
Killarney Secondary	Environmental awareness mural
Killarney Secondary	Enhanced recycling program
Kitsilano Secondary	Native plant garden & pollinator hotels
Laurier Elementary	Garden repairs and pollinator plants
Lloyd George Elementary	Sustainability in a Covid world – classroom compost and
	rechargeable batteries
Lord Elementary	Mud kitchen
Magee Secondary	Hydroponic vertical farming
Maquinna Elementary	Gardening tools and equipment
McKechnie Elementary	Grow lights, garden tools, & vermiculture compost bins
Nelson Elementary	Container gardens
Nightingale Elementary	Soil and seeds
Nootka Elementary	Walk, roll, and wheel to school week
Norquay Elementary	Soil to replenish 18 garden boxes
Oppenheimer Elementary	School beautification art installation
Prince of Wales Secondary	School garden revitalization
Quilchena Elementary	Eco-fair Eco-fair
Roberts Annex	Materials for improving outdoor learning
Secord Elementary	Soft plastic recycling program
Selkirk Annex	Garden supplies
Selkirk Elementary	Gardening tools, gloves, & soil

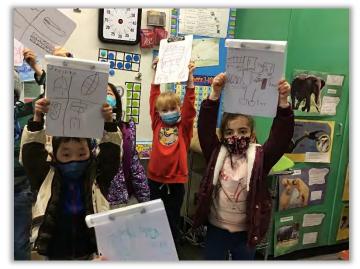
Sexsmith Elementary	Pollinator plants and bug hotels
Seymour Elementary	Site preparation for garden expansion
South Vancouver Learning Centre	Solar powered garden irrigation
Southlands Elementary	Classroom compost bins
Spectrum, West, Foundation	Garden box revitalization
Tecumseh Annex	Sustainability literature for K-3 learners (see Appendix A)
Tennyson Elementary	School garden boxes
Thompson Secondary	Enhanced recycling program
Thunderbird Elementary	New garden boxes
Trudeau Elementary	Garden tools and gloves
University Hill Elementary	Earth Day BBQ and Fair
Wolfe Elementary	Supplies to rejuvenate boulevard garden



Harvest at Nightingale Elementary



Enhanced recycling at Thompson Secondary



Showing off new outdoor learning supplies at Roberts Annex



Classroom composting at Southlands Elementary

Green Spaces

At a glance:

School	Project Description
Beaconsfield Elementary	Garden equipment for indoor growing
Champlain Heights Annex	Sensory garden plants and equipment
Dickens Elementary	Roof top garden improvements
Grenfell Elementary	Improving garden accessibility
Jamieson Elementary	Garden box installation
John Oliver Secondary	Garden rejuvenation & pollinator plants
Kitsilano Secondary	Native plant garden & pollinator hotels
Laurier Elementary	Garden repairs and pollinator plants
Lord Elementary	Mud kitchen
Maquinna Elementary	Gardening tools and equipment
McKechnie Elementary	Grow lights, garden tools, & vermiculture compost bins
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Wolfe Elementary	Supplies to rejuvenate boulevard garden

This year, the majority of funded projects were related to green spaces on school grounds. Supporting outdoor focused spaces and activities at school sites is a significant goal of the sustainability plan and has been an important aspect of adapting our schools to reduce the spread of Covid-19. Funds were used to refresh existing school garden boxes with soil, compost, and plants; purchase tools and equipment to enhance students' experiences; and to add to funds already raised to install new garden boxes.

Students used their school garden boxes to plant sensory gardens, explore native plants and pollinators, and study food sovereignty. Worms are being cultivated for vermiculture compost systems, veggies are ripening, and students are sharing the bounty of their harvests with the community.

Sunshine on: Wolfe Elementary

Students at Wolfe Elementary were eager to reconnect with the community after being away from their school for 2 years during seismic upgrading. Students undertook the task of revitalizing the boulevard garden at the front of their school. Since this garden is off school grounds, the students needed to consult and engage the local community as well as the City of Vancouver. Ideas for garden design

elements were generated by the grade 6 & 7 students, a plan for the work was made, and supplies purchased.

Their teacher says: "Not only did they create an amazing garden for their community, but they also learned valuable skills about design, plants, ecosystems, and budgeting. I think the most important lesson, and for me as their teacher, the most noteworthy growth has simply been in the students' connection to the earth, and to their community. Litter is no longer tolerated. They have a keen eye for weeds, and a gentle step in the garden. We are so looking forward to maintaining the garden and this legacy in the future. "



Growing peas at Selkirk Elementary



Rejuvenated Garden at Spectrum, West, and Foundation



Boulevard garden at Wolfe Elementary



Planting Native Species at John Oliver Secondary

Sustainability in Education

At a glance:

School	Project Description
Brock Elementary	Nature Sketch program
Churchill Secondary	Eco-workshop series
Crosstown Elementary	Zero waste awareness campaign for Earth Day
Grandview Elementary	Outdoor learning supplies
John Oliver Secondary	Sustainability week awareness campaign
Killarney Secondary	Environmental awareness mural
Magee Secondary	Hydroponic vertical farming
Oppenheimer Elementary	School beautification art installation
Quilchena Elementary	Eco-fair
Roberts Annex	Materials for improving outdoor learning
Tecumseh Annex	Sustainability literature for K-3 learners
University Hill Elementary	Earth Day BBQ and Fair

The foundation of sustainability in education is an appreciation for nature. Educators throughout the District are working tirelessly to foster connections to the natural world and support learning initiatives that develop environmentally conscientious citizens. There are many ways to support nature focused learning in every discipline. Some elementary schools used the grant funds to purchase outdoor learning supplies like clipboards and weatherproof materials, portable seating, and a wagon to create comfortable and mobile outdoor classrooms. Another school engaged a local artist to guide them through the Nature Sketch program, and others hosted extracurricular Eco or Earth Day Fairs for the whole community to reinforce classroom learning.

Secondary school students focused on projects that raise awareness and educate their peers – a workshop series outlining ways to replace single use items with reusables, hallway displays highlighting various forms of activism and nature appreciation, a mural painted by students, and Earth Week campaigns focusing on recycling, active travel, and climate change activism.

Sunshine on: Tecumseh Annex

Sustainability is a school-wide focus at Tecumseh Annex. To deepen the students' connection with the natural environment and learn more about sustainability, grant funds were used to purchase books targeting a K-3 audience.

"By building our resources, we can better support teaching and learning about sustainability. We have purchased a range of children's literature and informational texts that features children and families from around the world to initiate discussions about sustainability in the classrooms. With books we can infuse teaching and learning about sustainability into the curricula in a relevant, current, and meaningful way."

Please see Appendix A for the Tecumseh Annex Booklist.



Students enjoying new nature books

Resource Conservation and Climate Change

At a glance:

School	Project Description
Kerrisdale Elementary	Beeswax wraps
Lloyd George Elementary	Sustainability in a Covid world – classroom compost and
	rechargeable batteries
Secord Elementary	Soft plastic recycling program
Southlands Elementary	Classroom compost bins
Byng Secondary	Take-out container recycling program & elementary school
	climate education presentation
Killarney Secondary	Enhanced recycling program
Thompson Secondary	Enhanced recycling program

Conserving resources and reducing waste are significant areas in the sustainability plan, and historically the most common entry point for individuals to think about the impact of their day-to-day activities on the environment. While lighting and heating upgrades aren't within teacher and student control, the day-to-day environmental "hygiene" can be. Students tend to notice the volume of waste in the lunchroom, and the inattentive recycling practices of peers. There are many opportunities for student

groups to improve waste diversion and enhance the recycling practice and culture at their schools.

Sunshine on: Thompson Secondary

One teacher, along with several students at David Thompson Secondary recognized that their peers were failing to follow the basic recycling guidelines for the bins at school. Furthermore, they realized that many items going to landfill could actually be diverted with a little bit of extra effort and commitment. The Recycling Club was formed and set three goals: enhance the recycling system beyond the regular blue bins; increase the use of the organics bins; and spread awareness and knowledge so the student body can make the best choices about waste. Grant funds were used to purchase litter picker tools, buckets, high-visibility vests, and a storage rack. Recycling club volunteers use the tools to save recyclables from "a trashy fate" by removing them from landfill bins and placing them in the correct spot. Their teacher sponsor volunteers his own time to take the "specialty" items to the Zero



Rescuing items from a "trashy fate"

Waste Centre. Meanwhile, they created a "mobile teaching station" to deliver training to other classrooms. The Recycling Club is now up to 25 members, as other students have joined the cause.

"Plans are made for next September for increased educational outreach for all incoming students to increase awareness...We want to focus on 1) being Informed Recyclers, and 2) being Active Recyclers."

Sustainable Transportation

At a glance:

School	Project Description
Britannia Secondary	Bike project – bike rack repair, bike to school week, and
	bike repair cafe
Carleton/Cunningham Elementary	Bike kitchen (bike tune-ups)
Churchill Secondary	Zero emission mission – reducing commute carbon
	footprint
Fraser Elementary	Bike rack installation
Hastings Elementary	Scooter racks
Nootka Elementary	Walk, roll, and wheel to school week

Supporting active transportation choices for school communities promotes health, reduces vehicle congestion around schools, and cuts carbon emissions. By choosing to walk, bike, roll, or take transit to school students can make a noticeable impact on their local community. Projects fall into two areas – awareness campaigns and infrastructure improvements.

Encouraging active travel, either all year round or for a special event like bike to school week or a walk, bike, and roll event, provides students and their families the opportunity to safely try out a different way of getting to and from school, with the added incentive of prizes, stickers, and celebrations. Improved infrastructure at school ensures that there are secure places to lock up bikes and scooters which helps make the choice to bike or roll to school easier.



New bike rack installed at Fraser Elementary

Sunshine on: Britannia Secondary

The Britannia Green Club launched the Bike Project at Britannia Secondary School. There were three components to the project: repairing the current bike racks, participating in the Bike to School Week, and hosting a bike workshop. The club worked with the school administration and the Grounds Department to reconfigure existing bike racks and add new ones, volunteers promoted bike to school week and handed out treats and prizes to participating students, and the students contacted a local organization to help them put on a bike maintenance workshop.

"The Bike Project was a multistep process and required a substantial amount of coordination between various people. This project will have both short-term and long-term impacts on sustainability at Britannia in the future. Repairing the bike racks will yield a long-term result as school infrastructure will no longer stop students from biking to school in the future. The bike workshop helps students in grades 8-12 to continue biking to school with more knowledge regarding safety and both the repairing and maintenance of bikes. The Bike to School Week element of the project encourages students at Britannia to consider and explore more sustainable means of transportation. Ideally, students will enjoy alternative means of transporting to school that are more sustainable over being driven to school."

Appendix A – Tecumseh Annex Sustainability Booklist

<u>KINDERGARTEN SCIENCE CONNECTION – plants</u> and animals, seasons

Life - Cynthia Rylant, Brendan Wenzel

Tokyo Digs a Garden - Jon-Erik Lappano, Kellen Hatanaka

This is the Tree We Planted - Kate McMullan, Alison Friend

Under Your Feet... Soil, Sand and Everything Underground Horticultural Society Royal, Wenjia Tang

Pollinators:

Bee: A Peek-through Picture Book - Britta Teckentrup

A Long Way Home (butterflies) - Jean Little, Gabrielle Grimard

GRADE 1 SCIENCE CONNECTION – living things, local plants and animals, adaptations

Life - Cynthia Rylant; illustrated by Brendan Wenzel

Humongous Fungus - Lynne Boddy, Wenjia Tang

Fox: A Circle of Life Story - Isabel Thomas, Daniel Egneus

Adaptations:

Moth: An Evolution Story by Isabel Thomas, Daniel Egneus

GRADE 2 SCIENCE CONNECTIONS – life cycles, metamorphosis, water

Life Cycles:

Spin a Scarf of Sunshine - Dawn Casey, Stila Lim

Fox: A Circle of Life Story - Isabel Thomas, Daniel Egneus

Metamorphosis:

A Long Way Home (butterflies) - Jean Little, Gabrielle Grimard

Bee: A Peek-through Picture Book - Britta Teckentrup

Water:

Hey, Water - Antoinette Portis

What is a River? - Monika Vaicenaviciene

The Mess That We Made – Michelle Lord, Julia Blattman

Ocean Soup: A Recipe for You, Me, and a Cleaner Sea – Meeg Pincus, Lucy Semple

Ocean! Waves for All – Stacy McAnulty, David Litchfield

The Brilliant Deep: Rebuilding the World's Coral Reefs. The Story of Ken Nedimyer and the Coral Restoration Foundation – Kate Messner, Matthew Forsythe

Enough Water? A Guide to What we Have and How to Use It – Steve Conrad

Nibi's Water Song – Sunshine Tenasco

<u>GRADE 3 SCIENCE CONNECTION – biodiversity, ecosystems</u>

Forest Ecosystems:

This is the Tree We Planted - Kate McMullan, Alison Friend

The Boy Who Grew a Forest: The True Story of Jadav Payeng – Sophia Gholz, Kayla Harren

111 Trees - Rina Singh, Marianne Ferrer

Wangari's Trees of Peace: A True Story from Africa – Jeanette Winter

Listen to the Language of the Trees: A Story of How Forests Communicate Underground – Tera Kelley, Marie Hermansson

Before We Stood Tall: From Small Seed to Mighty Tree – Jessica Kulekjian, Madeline
Kloepper

Humongous Fungus - Lynne Boddy, Wenjia Tang

Under Your Feet... Soil, Sand and Everything Underground Horticultural Society Royal, Wenjia Tang

Fox: A Circle of Life Story - Isabel Thomas, Daniel Egneus

Ocean Ecosystems:

The Brilliant Deep: Rebuilding the World's Coral Reefs. The Story of Ken Nedimyer and

the Coral Restoration Foundation – Kate Messner, Matthew Forsythe

INDIVIDUALS CHANGING THE WORLD

Our House is on Fire: Greta Thunberg's Call to Save the Planet – Jeanette Winter

The Brilliant Deep: Rebuilding the World's Coral Reefs. The Story of Ken Nedimyer and the Coral Restoration Foundation – Kate Messner, Matthew Forsythe

The Boy Who Grew a Forest: The True Story of Jadav Payeng – Sophia Gholz, Kayla Harren

111 Trees - Rina Singh, Marianne Ferrer

Nibi's Water Song – Sunshine Tenasco

Wangari's Trees of Peace: A True Story from Africa – Jeanette Winter

CLIMATE CHANGE

The Story of Climate Change – Catherine Barr, Steve Williams, Amy Husband

The Brilliant Deep: Rebuilding the World's Coral Reefs. The Story of Ken Nedimyer and the Coral Restoration Foundation – Kate Messner, Matthew Forsythe

Moth: An Evolution Story by Isabel Thomas, Daniel Egneus



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