Promoting Urban Environmentalism Through Vancouver Recreation

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Table of Contents

- 7 Introduction
- **10** Vancouver Park Board Operating Structure
- **11** The Importance of Grassroots Environmental Action
- **13** Environmental Action through the Recreation Sector
- 17 Recommendations
- **19** Environmental Leadership Program Library Introduction
- 20 Research Scope
- **22** Using the Library
- **23** Theme 1: Incentivizing Lifestyle Change
- **25** Theme 2: Fostering Communication and Expression about the Environment through the Arts
- **27** Theme 3: Committing to Waste Reduction
- **29** Theme 4: Nurturing Sustainable Food Systems
- **31** Theme 5: Offering Environmental Science/Studies Education
- **33** Theme 6: Encouraging Green and Active Transportation
- **35** Theme 7: Enjoying Outdoor Space
- **37** Theme 8: Engaging in Urban Ecological Restoration and Conservation
- **39** Theme 9: Upholding a Climate Justice-Oriented Approach
- 41 Theme 10: Inspiring Environmental Leadership
- 43 Conclusion
- 44 Works Cited

Glossary

Climate Action

Action taken by governments, communities, and individuals to minimize and/or eliminate greenhouse gas emissions, and "lessen the devastating impacts of climate change, such as poor air quality, sea-level rise, increased inequality and health risks, both locally and globally" (CEAP pg.5, 2020)

Climate Literacy

The degree to which individuals understand the impact of human behaviour on the climate. "A climate-literate person:

- understands the essential principles of Earth's climate system,
- knows how to assess scientifically credible information about climate,
- communicates about climate and climate change in a meaningful way, and
- is able to make informed and responsible decisions with regard to actions that may affect climate" (U.S Global Change Research Program pg. 3, 2009)

Community Centre Association (CCA)

"Volunteer led, community-based non-profit societies incorporated under the Societies Act" (JOA 101 pg. 1, 2022). Vancouver is home to over 20 Community Centres across the city each with their own CCA

Climate Resilience

A concept that refers to the amount of disruption a climate system can endure "without changing its internal structure and losing its functioning capacity" (Zampieri et al, pg. 3, 2019)

Environmental Action

Engaging in activities outside of daily tasks with the intention of improving the environment. Actions may take the form of environmental/climate education, commitments to sustainable transportation, and/or restoration of ecosystems.

Everyday Environmentalism

Small actions in daily life to adopt more sustainable habits with minimal environmental implications (Grasso & Giugni 2021)

Ecological Footprint

The amount of land and water needed to support a community's consumption habits (Wackernagel 2019)

Pro-Environmental Behaviour

Behaviors and habits with the goal of minimizing environmental harm while engaging in activities designed to benefit the planet (Balundé et al 2019)

Vancouver Board of Parks and Recreation

The municipal body responsible for the maintenance of Community Centre Association facilities and all parks within the City of Vancouver (JOA 101, 2022)

Disclaimer

This report was produced as part of the Greenest City Scholars Program, a partnership between the City of Vancouver and the University of British Columbia, in support of the Greenest City Action Plan and the Healthy City Strategy.

The project was conducted under the mentorship of City and Park Board staff. The opinions and recommendations in this report, and any errors, are those of the author, and do not necessarily reflect the views of the City of Vancouver or The University of British Columbia.

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Part One: Context

Executive Summary

Vancouver residents have expressed concern for climate change and environmental issues and are looking for guidance about how they can contribute to solutions (C4CH 2021). Research shows that the average person lacks adequate climate literacy (Maniates, 2001). The Communities for Climate Hope (2021), an initiative led by Sarah Lusina, former President of Trout Lake Community Centre Association, identifies Vancouver's Community Centres as ideal venues to educate and subsequently mobilize city residents towards taking meaningful environmental action through the facilitation of 'Green Programming' (C4CH 2021). The research presented in this report responds to the recommendations of the C4CH report by illustrating how environmentally focused programming at community centres can empower Vancouver residents to engage in environmental action and restore hope for the future. The goal of such programming is to promote pro-environmental behaviour for community centre patrons so that they assume more leadership in caring for the environment. Part One of this report consists of a literature review with contextual information about role of local communities in addressing environmental issues, while part Two includes a 'library', referred to as the Environmental Leadership Program Library, filled with descriptions and examples of environmentally focused initiatives for community centres to reference in developing their own environmental recreation programming.



Introduction

In 2020, Vancouver became one of 1,700 jurisdictions worldwide to declare a climate emergency (CEAP 2020). The announcement came after years of climate induced environmental disasters which threatened the survival of ecosystems and communities in the city (CEAP 2020). In response, the City of Vancouver (CoV) established a Climate Emergency Action Plan (CEAP 2020), which outlines six 'Big Moves' to fundamentally shift the way the city operates and alter individual behaviour towards a climate resilient future. The six 'Big Moves' at the foundation of the Vancouver CEAP are:

Big Move 1: Walkable Complete Neighbourhoods

By 2030, 90% of people live within an easy walk or roll of their daily needs

Big Move 2: Active Transportation and Transit

By 2030 two thirds of all trips in Vancouver will be made by foot, bike, or transit

Big Move 3: Zero Emissions Vehicles

By 2030, 50% of the kilometers driven on Vancouver's roads will be by zero emissions vehicles

Big Move 4: Zero Emissions Space and Water Heating

By 2030, the carbon pollution from buildings will be cut in half from 2007 levels

Big Move 5: Low-Carbon Construction Materials

By 2030, the embodied emissions from new buildings will be reduced 400% compared to 2018

Big Move 6: Restored Coasts and Forests

By 2021, "negative emissions" targets are developed by restoring forests and coastal ecosystems



The CEAP complements previous commitments from the city to foster environmental sustainability and environmental justice. In 2011, the City embarked on an ambitious initiative known as Vancouver's Greenest City Action Plan (2010). At the time of the plan's inception, it was recorded that "Vancouver residents have an ecological footprint three times larger than the Earth can sustain" (GCAP pg. 5, 2011). The plan suggests there are concrete actions to alter our societies' impact on the Earth by fostering the following green initiatives:

Green Economy - Supporting green jobs and ensure companies operate with minimal environmental impact

Climate Leadership - Becoming a global leader in greenhouse gas reduction

Green Buildings – Ensuring new buildings are carbon neutral while reducing energy use in current buildings

Green Transportation – Ensuring most transportation is not taken by car while reducing commute distances

Zero Waste - Minimizing waste sent to a landfill

Access to Nature - Ensuring Vancouver residents live within close proximity to greenspace

Lighter Footprint - Decreasing Vancouver's overall ecological footprint

Clean Water - Maintaining or exceed current drinking water standards and reduce water consumption

Clean Air - Maintaining or exceed current air quality guidelines

Local Food - Creating more food access sites across the city

With the implementation of Vancouver's Greenest City Action Plan and subsequent Climate Emergency Action Plan, the municipal government has clearly outlined their commitment towards addressing climate change on a local scale through planning and policy interventions. Municipal intervention alone, however, is not enough to prevent catastrophic environmental decay. As scholars suggest, "neither bottom-up [those initiated at the grassroots level] nor top-down [such as those led by government] approaches to environmental management can be successful in isolation" (Bruyneel pg. 68, 2009). Instead, and as affirmed in Vancouver's Greenest City Action Plan, "it's up to everyone to do their part, to rethink, re-evaluate and re-imagine the way Vancouver works and how we lead our lives" (GCAP pg. 3, 2011). This will require improved collaboration and communication between governments and grassroots organizations. We propose that Vancouver Community Centre Associations (CCAs) in partnership with the Vancouver Park Board assume leadership in promoting pro-environmental behaviour among their patrons by facilitating environmental and sustainability-focused programming.

GREENEST CITY

Vancouver Park Board & Community Centre Operating Structure

Before describing the ways that CCAs can inspire patrons to engage in environmental leadership, it is important to outline the framework under which the Park Board functions. Vancouver Park Board runs under a unique operating structure in partnership with Community Centre Associations (CCAs) across the city. In 2018, a formalized Joint Operating Agreement (JOA) came into effect which clearly outlined the roles of both entities. As of March 2021, 17 of the 24 Vancouver community centres are represented in the JOA (Lusina 2021). As per section 5.2 of the JOA, the Park Board has jurisdiction over parks in the city, as well as associated facilities, including the buildings out of which community centres operate. These facilities are jointly operated with CCAs, as section 5.3 of the JOA indicates. CCAs are responsible for the organization as well as the delivery of recreation programing in their jointly operated facility. While this framework is different from parks and recreation in other cities where a municipal council has exclusive oversight over parks and recreation, "the Vancouver model of community centre programming offers many strengths...[under this structure] resident level input and community leadership is enabled" (Lusina pg. 17, 2021).

Mobilizing CCAs Towards Taking Meaningful Climate Action

The unique operating structure of Community Centre Associations offers opportunity to reach residents across the city in meaningful ways. Because CCAs facilitate programming aimed at serving the interests and demographics of their patrons, programming staff can curate programming catered to their respective communities. Our goal is to leverage the unique opportunities afforded under this operating structure to involve community centre patrons in environmental action through fun, accessible, and educational recreation programming for all ages and abilities.

Inspiration for the Environmental Leadership Program Library

The establishment of the Environmental Leadership Program Library was inspired by the foundational research outlined in the Communities for Climate Hope (C4CH) report by Sarah Lusina, Past President of Trout Lake Vancouver Community Association. C4CH outlines that residents of Vancouver care deeply about environmental issues but require guidance about where to direct their efforts. As the report notes, Community Centre Associations are uniquely positioned to mobilize their patrons to take meaningful environmental action. By building community and offering programming that caters to a wide range of interests and abilities, there is much the recreation sector can do to inspire change, empower action, and benefit the planet. The C4CH report provides a list of "Green Programming Ideas" under the categories of rebates and incentives, arts and culture, waste reduction, food-focus, and education. The Environmental Leadership Program Library created throughout our research simply builds upon the ideas presented in C4CH to illustrate the many opportunities to mobilize environmental action through recreation.

The Importance of Grassroots Environmental Action

Environmentally-focused grassroots initiatives, those described as community "networks and activists and organizations generating novel bottom-up solutions of sustainable development" (Feola & Nunes 2014), are an integral component of yielding a sustainable future. Environmental action led through grassroots initiatives tend to challenge the status quo by "advocat[ing] for a profound criticism about how life is organized in advanced capitalist societies (Dal Gobbo 2022)", such as Vancouver. Communities are thereby encouraged to become involved in movements in a variety of ways, whether it be political mobilization, or personal protesting and boycotting by making informed consumer decisions (Forno & Wahlen 2021). Policymakers and government leaders often rely on local wisdom at the grassroots level in the implementation of environmental regulation to ensure nuanced perspectives are considered (Bruyneel 2009) as society shifts towards adopting more sustainable practices. Further, grassroots action is imperative to addressing the climate crisis because national governments are failing to enact the policies needed to avoid catastrophic climate change, prompting climate scientists to call "for grassroots, civil [and] society action" (Rootes et al 2012) to promote change. Finally, for meaningful environmental action to take place "strategies need to be emotionally and morally salient in people's lives" (Forno & Wahlen 2021) which is more likely to be achieved by grassroots rather than government action.

Potential Outcomes and Limitations of Grassroots Environmental Action

Potential Outcomes

Outcomes of grassroots environmental action generally include improved community cohesion, a sense of belonging, and a greater drive for change among individuals among those involved. According to researchers, "it is generally agreed that the success of grassroots innovations can be identified through their social links to members of local communities, building capacity and empowering social actors" (Feola & Nunes pg. 246, 2014). The capacity garnered from such movements determine the degree of influence they will have in shifting perspectives and encouraging action from the bottom-up. Improved social connection fuels community optimism and can foster a sense of hope for the future of the climate and the environment.

Limitations

While grassroots mobilization is associated with significant societal benefits, it is important to acknowledge the potential limitations and uncertainties following such efforts. The direct benefit grassroots movements have on improving the environment, are not well understood, as "little research has been carried out to systematically quantify the impacts" (Feola & Nunes 2014). To date, most of the impacts have been measured using anecdotal evidence, which is valuable in and of itself, but not precise in assessing the benefits to the environment. Further research must be completed about specific actions to determine the environmental impacts.



Words of Caution

Prominent narratives in mainstream environmentalism tend to lend the impression that individual and group behaviours yield greater environmental benefits than they do in reality (Wynes et al 2020). In Wynes and collogues' study measuring the 'climate impact of individual actions', it was found that participants overestimated the impact from activities commonly understood to have environmental benefits including using reusable grocery bags and buying food products without plastic packaging (Wynes et al 2020). The study notes that many individuals are willing to alter their behaviour to those "that they believe...are more effective in combatting climate change" (Wynes et al pg.1528, 2020). As a result, it is critical that accurate information is clearly communicated about the impact and limitations of particular pro-environmental behaviours. Promoting environmental action at the community level, however, has been criticized for misleading the public about their potential to curb environmental crises (Maniates 2002). This is because such action occurs separately from government initiatives, thus suggesting that everyone is equally responsible for the state of the environment and solutions to climate change When harmonized with bold government action, however, grassroots action has potential to generate greater environmental impact.



Environmental Action Through the Recreation Sector

The recreation sector interacts directly with members of Vancouver communities. Recreation serves the public through fun, affordable, and inclusive programming. There are opportunities to foster pro-environmental behaviour across the city by incorporating more environmentally focused recreation programming at community centres.

Facilitating Environmental Programming Through Recreation

Our research suggests environmental programming available at community centres across the city is currently limited. To assess the amount of environmental programming occurring, spring and summer 2022 Recreation Program Guides and/or online registration portals from 27 CCAs were surveyed. All environmentally focused programs were recorded on a spreadsheet categorized by CCA. While many CCAs incorporate environmentally focused workshops, cleanup days, or special events into their programming, there are few themes from which to choose. Environmental programming themes at Vancouver CCAs included:

- Gardening workshops and classes for different ages
- Do-it-yourself (DIY)/Upcycling (the process where recycled materials are used to create something new and improved)
- Bicycle classes for different levels and abilities
- Garbage Clean-Ups
- Emergency Preparedness Workshops for adults
- Coolhoods climate leadership programs



Our research suggests that **56** environmentally focused programs were run across **27** Vancouver community centres in the spring and summer 2022. **13** of these programs are catered to an adult audience, where **14** are catered to children and youth. **29** programs are designed for a general audience. While our assessment of recreation programs was limited to spring and summer recreation programming, we identified six major gaps in the environmental programs currently offered by Vancouver community centres as indicated below:

Demographics

The environmental programming designed for adults tend to cater to those with young children and seniors. For example, the activities marketed for all ages tend be children-oriented, such as community garbage clean ups that have simultaneous children's programming. We suggest that more can be done to engage young – middle aged adults in environmental action, particularly programming focusing on climate literacy and environmental education.

Education and Climate Literacy

Education and awareness tend to be the primary avenue for encouraging pro-environmental behaviour. Only 2 of the 27 community centres offered education-based environmental programming for patrons to to learn about the scientific, social, and economic dimensions of environmental sustainability. Education programs are not season-dependent and have the potential to be offered year-round at Vancouver community centres. Sharing information in engaging ways with patrons is often the best place to start when initiating action.

Integration Into Existing Programs

Designing new programming may seem like a significant task, however, it is important to note that environmentally focused initiatives and programming do not have to be stand alone programs. Better yet, environmental content can be incorporated into already existing programs. For example, many community centres run children's day camps in the summer. These camps can focus on environmental education while engaging children in fun and creative ways. This could be as simple as running recreation activities outdoors.



Community-Building

Community-building is central to successful environmental action. While this is often a natural effect of environmental action, there is a lack in programming designed to specifically contribute to community building. This could take the form of conversations that assess the community's most significant environmental concerns.

Environmental Justice-Focused

Overall, the way environmental action is discussed in recreation-based programming seems to address a particular view of environmentalism. From our observations, a key piece that is missing from this perspective is the inclusion of environmental-justice focused programming, one that acknowledges that the impacts of environmental climate issues are not evenly distributed. Equity must be central in developing solutions.

Skills Training

The goal of facilitating environmental programming at Vancouver community centres is for Vancouver residents to take on more environmentally responsible behaviour in their own lives and help foster this awareness for others. Based on the programming offered in 2022 spring and summer recreation guides, there are few opportunities to gain skills that patrons can use in their lives outside of community gatherings to foster sustainability such as bicycle maintenance, home gardening techniques, and urban beekeeping. Moving forward, it is wise to offer opportunities for people to gain skills so they can easily choose sustainable alternatives in their own lives.



Learning by Example

In identifying the ways Vancouver CCAs can strengthen their environmental programming, we turned to examples from other regions for inspiration. Our research scope included municipalities located in coastal regions in the Pacific Northwest. Our sample consisted primarily of cities in Vancouver's Lower Mainland and on Vancouver Island, Seattle Washington, Portland Oregon, and San Francisco California. Our intention was to incorporate examples from cities with relatively similar climate patterns and population sizes to Vancouver. In addition, the impacts of climate change continue to override borders, as such, it is important that our efforts are unified across the region. Our research suggests that environmental programming through municipally run recreation centres was also limited among the cities featured in our research scope. As such, we looked to environmental initiatives run from a variety of different institutions including universities, non-profit organizations, and childcare programs. The programs we found have the potential to be replicated or adapted by Vancouver CCAs. The following list represent 10 avenues by which Vancouver communities can support environmental sustainability initiatives based on examples from other jurisdictions:

Incentivizing Lifestyle changes

Fostering Communication and Expression about the Environment Through Arts

Committing to Waste Reduction

Nurturing Sustainable Food Systems

Offering Environmental Science/Studies Education

Encouraging Green and Active Transportation

Enjoying Outdoor Space

Upholding Climate Justice-Oriented Approaches

Engaging in Urban Ecological Restoration and Conversation

Inspiring Environmental Leadership

Strategies to Involve the Community in Environmentalism

According to the European Commission, there are 4 key approaches that tend to trigger proenvironmental behaviours that CCAs may want to consider in developing environmental programming:

- Education and Awareness sharing accurate, comprehensive, and accessible information
- Outreach and Relationship Building getting people involved in workshops, training, and events to shift attitudes and perspectives
- Social Influence this strategy compares behaviour between others to inspire changes in behaviour
- Nudges and Behavioural Change those that encourage people to make environmentally responsible decisions
- Incentives those where participants receive recognition or compensation for their efforts

Recommendations

Moving forward, we have 6 recommendations for the Park Board to consider as more environmental programming is incorporated into recreation at Vancouver community centres:

1.Gather feedback on library themes from community centre patrons

The Park Board now has a list of potential programs to offer to encourage their patrons to engage in more environmental action. To ensure the programs are well attended, it will be important to offer programming that patrons are interested in pursuing. As a result, we recommend that CCAs gather feedback from their patrons to get a sense of what kinds of programs should be incorporated in their recreation guides. Engagement can take the form of feedback surveys, interviews, workshops, and drop in conversations with community centre patrons.

2. Work with programmers to curate environmental programming for all seasons

After engagement has occurred with patrons, we suggest that programmers curate environmental programming for each season. While some activities are season-dependent, many are not and can be offered any time of year.

3. Develop goals and/or a monitoring system to assess progress over time

To ensure more environmental action takes place, we suggest that each CCA develop specific goals associated with environmental programming. Goals may include a target number of environmental programs offered each season and/or a target number of patron enrolment. We suggest that CCAs set internal deadlines to achieve their goals.

4. All CCA and Park Board staff engage in climate literacy workshops

Critical to this work is climate literacy. We recommend that staff have access to climate literacy workshops and resources to better design programming that addresses their community's environmental priorities.

5. Survey fall and winter program guides to assess environmental programming offered

Because only spring and summer program guides were assessed for this research, moving forward, it will be important to know if there is environmentally focused programming may be offered at other points in the year.



Part Two: Library

Environmental Leadership Program Library: Introduction

Vancouver residents are craving further involvement in addressing the city's most pressing environmental issues (C4CH 2021). Community centres are uniquely positioned to foster community-based environmental action by incorporating environmental initiatives, workshops, and activities as a part of recreational programming across the city. In turn, CCAs can design environmental programming specifically catered to their patrons' interests and knowledge gaps. Research tells us that grassroots action is successful in influencing change from the bottom up. As a result, we have an incredible opportunity to empower our communities to foster a sustainable future. The Environmental Leadership Program Library featured below is comprised of examples of community focused and grassroots-oriented environmental initiatives in coastal regions across the Pacific Northwest including Portland Metropolitan Area, San Francisco-Oakland-Berkley Metropolitan Area, Seattle-Tacoma-Bellevue Metropolitan Area, and Metro Vancouver. Examples of programs and workshops were drawn from those offered by non-profit organizations, academic institutions, neighbourhood groups recreation centres. The initiatives included in the library are those that could be replicated and adapted by CCA programmers to encourage sustainable action and empower communities through environmental knowledge and skills. The information included below is intended to inspire Park Board Recreation Programmers to include increased environmentally focused programming based on successful precedents from other jurisdictions. The library is comprised of the following ten themes of environmental programming:

Incentivizing Lifestyle Changes

Fostering Communication and Expression about the Environment Through Arts

- Committing to Waste Reduction
- Nurturing Sustainable Food Systems
- **Offering Environmental Science/Studies Education**
 - **Encouraging Green and Active Transportation**
 - **Enjoying Outdoor Space**
- Upholding Climate Justice-Oriented Approaches
- **Engaging in Urban Ecological Restoration and Conservation**
 - **Inspiring Environmental Leadership**

Research Scope

The Environmental Leadership Program Library features examples of successful precedent programs in coastal regions of the Pacific Northwest. The research scope for the library was limited to this geography to get a sense of the kinds of community-oriented environmental initiatives occurring in jurisdictions with relatively similar climate patterns as Vancouver. Additionally, it was important to include examples outside of Canada and the province of British Columbia to demonstrate how environmental issues are not confined to arbitrary boarders drawn in the process of colonizing Indigenous territory. In fact, if effective environmental action is to take place, unifying efforts across the region has greater potential to make a difference. Finally, most of the examples featured in the library are drawn from urban areas with similar populations as Vancouver to illustrate the possibilities available to us in terms of grassroots environmental action facilitated through recreation.



Inspiration for the Environmental Leadership Program Library

The establishment of the Environmental Leadership Program Library was inspired by the foundational research outlined in the Communities for Climate Hope (C4CH) report by Sarah Lusina, Past President of Trout Lake Vancouver Community Association. C4CH outlines that residents of Vancouver care deeply about environmental issues but require guidance about where to direct their efforts. As the report notes, Community Centre Associations are uniquely positioned to mobilize their patrons to take meaningful environmental action. By building community and offering programming that caters to a wide range of interests and abilities, there is much the recreation sector can do to inspire change, empower action, and benefit the planet. The C4CH report provides a list of "Green Programming Ideas" under the categories of: rebates and incentives, arts and culture, waste reduction, food-focus, and education. The Environmental Leadership Program Library simply builds upon the ideas presented in C4CH to illustrate the many opportunities to mobilize environmental action through recreation.



Using the Library

1.Under each category in the library, there are a series of different sample events, workshops, and programs corresponding to the category. Programmers interested in pursuing more effective waste reduction strategies at their community centre may be most interested in the *Committing to Waste Reduction* section, for example. For those with general interests, look through all the different categories to determine which are of most interest.

2. Each event, workshop, and program listed in this document is a program that has been run within the region of the Pacific Northwest.

3. Each example features the name of the program, the location in which it takes place and a brief description.

4. For further information about the program, or the organization facilitating the program, click the hyperlink to be taken directly to the associated webpage. Hyperlinks are embedded in each program title, and indicated with an <u>underline</u> as illustrated in the example below:

Program: Commuter Calculator

Location: San Francisco, California

Description: The University of Washington has created a 'Commuter Calculator' that compares the economic (measured in money spent/saved), environmental (measured in CO2 emissions), and physical (measured in caloric expenditure) gains and losses depending on an individuals' mode of transportation for their commute.

Instructions for Locating Descriptions in Recreation Program Guides:

Several links in the library lead to a program guide available in a digital PDF. To find a description of the program you are interested in within the program guide, either click the magnifying class symbol to search through the document. Type in the title of the program and click enter to access the page with the information you are looking for. Alternatively, if you are using a Mac, you can press command+f to initiate the 'search document function; and type in the keyword, followed by the enter key. On a PC, to operate the search function, ctrl+shift+f followed by the keyword and the enter key.



Incentivizing Lifestyle Change

Establishing incentives, where those engaged in sustainable environmental action reap benefits (i.e., economic, education, or social benefits), can serve as impactful preliminary action for those becoming involved in environmental action for the first time. The individual lifestyle changes necessary for a sustainable future will not take shape overnight. Incentives, particularly those associated with economic earning and saving, have the ability to "spur behavioural change" (Climate Adapt, 2016). See below sample initiatives to incentivize lifestyle changes through recreational programming:

Commuter Calculator

Location: San Francisco, California

The University of Washington has created a 'Commuter Calculator' that compares the economic (measured in money spent/saved), environmental (measured in CO2 emissions), and physical (measured in caloric expenditure) gains and losses depending on an individuals' mode of transportation for their commute. The calculator compares the impact between the following modes of transportation: walk, bike, transit, drive, carpool, and vanpool. The software calculates how much money is required to support a person's yearly commute, and how much carbon is reduced if they were to change their mode of transportation.

Carbon Footprint Challenge

Location: San Francisco, California

Scone runs an international competition where teams can register for a challenge to reduce their carbon footprint. The organization encourages people to engage in behaviours that will lead to a zero-emission future. The company also has an app to help encourage step-by-step changes in behaviour.

Heat Pump Education

Location: Vancouver, British Columbia

Heat pump education is provided at Vancouver community centres to promote an understanding of the environmental impact of switching to an electric heat pump. Patrons learn about their potential to earn rebates by switching to electric heat pumps in their homes. Sample pumps have been on display at various Vancouver community centres.

<u>Ride and Drive Clean</u> Location: San Francisco, California

The Sunset Community Festival in San Francisco has hosted an Electric Vehicle (EV) and Electric Bike (E-Bike) 'Showcase' for those considering purchasing an EV. The Showcase has offered community members to learn more about the vehicles and how they operate. Community members who own EVs and E-Bikes are invited to bring their vehicles to the Showcase and share their knowledge with those considering purchasing their own EV.



"Economic Policy Instruments can significantly improve an existing policy framework by incentivizing, rather than commanding, behavioural changes that may lead to adaptation" (<u>Climate Adapt 2016</u>).



Incentivizing Lifestyle Change

Fostering Communication and Expression about the Environment Through Arts

Different art forms provide people an avenue to channel their thoughts and environmental concerns to spark action. The arts can translate scientific knowledge that may seem abstract to the average person into more personal experiences. The arts and culture sector can support the environmental movement by promoting dialogue among audiences and communicating complex concepts related to environmental science.

<u>Climate Music</u> Location: San Francisco, California

The organization "communicate[s] a sense of urgency about the climate crisis by combining climate science with the emotional power of music to drive meaningful action". All music composed is rooted in science and creates art through an interdisciplinary collaboration between "world class scientists, composers, musicians, artists, and technology visionaries".

Environmental Poetry Slam for Youth Location: Seattle, Washington

A live-streamed competition for youth slam poetry focused on environmental content promoted discussion and expression of experiencing the crisis from a youth perspective. Winners of the contest received a donation to an environmentally focused organization in their name.

<u>Glean Portland</u> Location: Portland, Oregon

The Glean program in Portland offers artists the opportunity to create pieces with "discarded materials...to inspire people to think about their consumption habits, the waste they generate and the resources they throw away". Every year there is an exhibit of all the art created by the initiative. This could be a low-cost workshop or program offered by a Vancouver community centre.

Portland Ecosystem Street Art

Location: Portland Oregon

Portland-based artists have created large murals in widely featured in prominent public places illustrating the functioning of local ecosystem. The murals are painted using sustainable materials and are decided to contribute to environmental literacy in the community.





"We need to continue encouraging each other to take action and use our voices...There are many ways to take action, such as voting, spreading your knowledge, or even making art and music"

(Climate Music 2022)



Fostering Communication and Expression about the Environment Through Arts

Committing to Waste Reduction

In 2019 alone, about 2.6 tonnes "of municipal solid waste was disposed" (BC Gov 2019). The materials we use and the belongings we acquire are not designed to exist over time, prompting many to purchase new materials on a regular basis. In addition, much of our daily activities still rely on tools that produce significant waste. In addition, there is an increasing demand to accumulate new products that are not necessary for the functioning of households (Ivanova & Stadler et al 2015). Community-led programs listed below are designed to discourage the purchasing of single use and minimally used objects and instead support a circular economy A circular economy, as described in in Sadhan Kumar in Circular Economy: Global Perspective is "an economy where the value of products, materials, and resources is maintained in the economy for as long as possible, and the generation of waste minimized" (Ghosh pg. 7, 2020).

Green Events Guide Location: Seattle, Washington



University of Washington has a step-by-step guide about how to run a 'green' event by carefully choosing catering, activities, decorations, and logistics. There are many considerations to make when running events, therefore, the guide offers recommendations for promoting sustainable options to events, lists of local food vendors, and a plan for what to do with any leftover food and materials not consumed at the event.

Kids Bike Library

Location: Vancouver, British Columbia

Kids outgrow sports equipment quickly. Replacing gear with new materials can become costly and produce unnecessary waste. The Bike Kitchen's Kids Bike Library allows kids to borrow a bike until they no longer fit, at which point the bikes can be returned.

Upcycling Workshops

Location: Vancouver, British Columbia

Many community centres across the city of Vancouver lead workshops with patrons to reuse or 'upcycle' belongings such as old clothes to reduce consumption of new materials. Workshops at Vancouver community centres have included: make your own soap/shower products, posters/artwork, clothing, and jewelry.

Vancouver Tool Library Location: Vancouver British Columbia

The Vancouver Tool Library is designed to promote sustainability by providing a supply of "tools for home repair, gardening, and bicycle maintenance" that can be loaned out to members of the community. The library removes the need to purchase new tools that would not be well used by owners or thrown out after a single use. The library also runs "affordable workshops" for community members to gain maintenance skills on do-it-yourself projects.



The Circular Economy Illustrated from:

Circular Economy: Global Perspective: Sadhan Ghosh



Source www.spcadvance.com In RP, 2017

Diagrammatic representation of a circular economy based on 6R approach.

"Our consumer habits are actually driving climate change. A 2015 study [Ivanova & Stadler) found that the production and use of household goods and services was responsible for 60 percent of global greenhouse gas emissions" (Cho, 2020).

> Kids Bike Library Kids Bike Library Wednesday, May 25th 3-6 PM Outside the Bike Kitchen Source: <u>UBC Bike Kitchen</u>



Nurturing Sustainable Food Systems

Many organizations across the Pacific Northwest Coast are committed to using food deemed unacceptable to be bought and sold in conventional grocery stores. The goal is to minimize food waste while addressing food insecurity. Upcycling food programs, also known as 'food rescue', are often paired with cooking lessons to teach people skills about sustainable eating. Food has the power to bring people together. As the examples below show, there is much opportunity to reduce and eventually, eliminate food waste while promoting greater access to nutritious and sustainably sourced food.

<u>Centre for Sustainable Food</u> Location: Vancouver, British Columbia

The Centre for Sustainable Food operated out of the University of British Columbia offers a range of programming, from educational walks around the farm grounds, gardening workshops, cooking classes, and a community market. The has an Indigenous garden, and operates a series of children's programming throughout the year centered around food and sustainable food systems.

<u>Food Shift</u> Location: San Francisco Bay Area, California

Food Shift runs a 'food rescue' program, whereby 'surplus and imperfect food are turned into healthy sustainable meals to combat food insecurity. The kitchen provides community members with cooking lessons as well as job training. The organization uses the term 'upcycled food products' to refer to those that would otherwise be deemed waste by grocery stores and restaurants. The organization created a "Seasonal Kitchen Guide", which is designed to teach people how to minimize waste, and use sustainable and affordable ingredients.

<u>Growing Gardens</u> Location: Portland, Oregon



"Growing Gardens uses the experience of growing food in schools, backyards and correctional facilities to cultivate healthy and equitable communities". The organization offers three key programs: 'Home Gardens', which supports households and families to grow and cultivate their own food, 'Youth Grow', which is designed to educate youth around healthy and sustainable food systems, and Lettuce Grow, which "works directly with incarcerated individuals in prisons to cultivate new skills and build a healthier community on the inside". The organization strives to promote equality in Portland communities through food.

Although there is increased local and global awareness around the issues of hunger and food waste, 35% of all food is still wasted in the U.S. 80 billion pounds of food" Food Shift 2022

Nurturing Sustainable Food Systems

<u>Outgrowing Hunger</u> Location: Portland Oregon

"Outgrowing Hunger builds and operates community farms and gardens for refugees, immigrants, and people who care about affordable access to real food in Portland and Grasham". The organization runs a community garden, farm, and targeted programming to serve their community.

<u>Urban Gleaners</u> Location: Portland, Oregon

Gleaners is an organization that gathers perishable food deemed unsellable (but still safe and delicious to eat!) from restaurants, grocery stores, corporate campuses, event sites, colleges, universities, farms, and wholesalers, that is then sorted and packaged for donation. The food collected is donated to a set of 35 different organization in the area including schools, markets, and groups designed to fight hunger.

<u>Sprouts Café and Community Eats</u> Location: Vancouver, British Columbia

Sprouts is a volunteer-run café at the University of British Columbia (UBC) that serves healthy and sustainable meals by donation and low prices. On weekdays, Sprouts serves meals made with produce from the UBC farm, as well as food donated from restaurants and cafes that would otherwise be thrown out (such as day-old bread). Other ingredients are ordered in bulk with minimal packaging. Every Friday, the café serves hot lunches by donation for those who bring their own reusable containers. The group has a bulk-buying club, sustainable food box, and a community fridge, stocked with 'rescued food' available to the UBC community for free.

"The Community fridge is a vital resource for the 40% of students at UBC who are food insecure"

Sprouts UBC 2020



Nurturing Sustainable Food Systems

Offering Environmental Science/Studies Education

There are opportunities to learn about climate change science and how to foster sustainable communities outside of academic institutions. Education can take place through many different avenues including land-based 'field trips', traditional in classroom learning, and community conversations. Some educational programs are offered through self-guided modules, courses, and online materials. Knowledge of environmental and climate science, as well as sustainability issues is empowering and critical to understanding the role of communities in contributing to solutions. There are many ways to learn more about the impact of community actions, as demonstrated through the programs featured below.

<u>Adult Educator Training and Professional Development</u> Location: King County, Washington

The government of King County offers a wide range of environmental education for all ages. There are internship programs available and technical skills that are taught to encourage people to pursue careers related to conservation and sustainability.

Children's Outdoor Programs, Day Care, and Summer Camps 2 Location: Vancouver Community Centres

Many community centres in Vancouver run children's summer camps and after school care that are focused on themes of environmental sustainability. Some involve learning about specifies, scientific concepts, and local ecosystems. Themes include:

- Gardening
- Science-based camps
- Outdoor crafts
- Bird watching
- Fishing
- Upcycling old materials
- Ecosystem scavenger hunts

<u>Climate Action Design Workshops</u> Location: Portland, Oregon



Climate Action Design Workshops provide skills to community leaders interested in starting their own environmental initiatives. Participants receive education through a variety of workshops that challenge them to think about the most pressing environmental issues in their communities and learn to design effective interventions in response. The program can be delivered both online and in-person.



Offering Environmental Science/Studies Education

<u>Climate Literacy Learning Program</u> Location: Vancouver, British Columbia

Metro Vancouver's Climate Literacy Module was established in response to the region's 2050 climate targets. It is a 'self-directed free learning program' comprised of seven modules. The course provides an overview of the foundational concepts of climate and environmental science and communicates the difference between climate adaptation and climate mitigation. Most importantly, it explains how human behaviour has perpetuated climate issues, such as sea level rise, decreasing freshwater resources, increasing extreme weather, ocean acidification, ecosystem disruption, and how all these impacts effect human health. The course can be completed within two hours and provides opportunities to test knowledge through quizzes and interactive ideas.

<u>Coolhoods</u>

Location: Vancouver, British Columbia

Coolhoods has been widely successful in cultivating greater environmental literacy across community groups in Vancouver. Participants are taught how to become 'Climate Champions' by leading climate-focused initiatives. The program was designed to bridge the gap between peoples' limited knowledge of climate change and their desire to become further involved in contributing to solutions in their neighbourhoods. Workshops are offered to teach community members to identify environmental effects caused by climate change. They are then taught to visualize how their neighbourhoods could be better designed to combat the negative impacts it has on their communities.

"My favourite thing about the workshop were the people... we could all work together and it was inspiring to see the ideas grow" Past Cool Hoods Champ

<u>Nature Time Chats</u> Location: Nanaimo, British Columbia

Nanaimo Parks and Recreation offers a variety of different themed 'Nature Time Chats' open to all ages where the community gathers to discuss different wildlife within the ecosystem in which they live, including Turtles, Raptors, and Bears.

<u>Outdoor Environmental Education</u> Location: San Francisco, California



Outdoor Environmental Education is designed for children and youth through San Francisco's Point Bonita YMCA. Different themes covered in this programming include: physical systems, ecology, environmental change, and, natural history. The programming is delivered outside and provides an immersive experience. The program is intended to also foster an inclusive community using a multi-disciplinary approach.

Offering Environmental Science/Studies Education

Encouraging Green and Active Transportation

Active transport is often turned to as an effective alternative to modalities with significant environmental impacts like driving. Cycling, however, is associated with a range of different barriers, including physical, financial, and logistic barriers. The following examples of programs are designed to remove some of the barriers associated with cycling. They also highlight alternative ways to organize around green transportation outside of cycling.

<u>Adaptive Biking</u> Location: Kelowna, British Columbia

The city of Kelowna offers 'adaptive cycling' classes for those of all abilities. The goal of such programming is to remove any mental or physical barriers people may experience in riding a bike in the city of Kelowna. The program is offered in different levels from beginner to advance to support the progress of participants.

Bike Kitchen Location: Vancouver British Columbia

The Bike Kitchen run out of UBC provides bike tools, affordable bikes, and materials to the university community. They facilitate workshops targeted for demographics who are under-represented in the cycling community. They have weekly clinics at places around campus aimed to serve communities that need it most, like graduate students with dependents and young families. Every month, there is a 'ride of the month challenge', where a new route within Vancouver is posted, and people are encouraged to upload photos from their rides on bike kitchen social media. They also run a program to build new bikes out of recycled materials from old bike stock.

<u>Community Cycle Centre</u> Location: Portland Oregon

Cycling is associated with a range of different barriers including the cost, the safety, and storage. Community Cycle Centre, located in Portland, is dedicated to nurturing "a vibrant community where people of all backgrounds use bicycle to stay healthy and connected". The organization facilitates many different programs to provide opportunities to those without a bike. Community Centre Cycle also runs bike maintenance workshops and works with school boards to advocate for safe cycle routes to local public schools.

<u>Community Walks</u> Location: Surrey, British Columbia

From May to September, Recreation Surrey offers a walking program to promote local exploration and use of public park areas in the city. Twice a month, walks are led by community volunteers to different locations.

Encouraging Green and Active Transportation

Measuring the Impact of Grassroots Cycling Initiatives 2022



Encouraging Green and Active Transportation

Enjoying Outdoor Space

People who feel connected to the natural environment and find joy in activities are more likely to engage in pro-environmental behaviours (Deville & Tomasso et al 2021). While education and direct environmental action is critical to addressing the environmental and climate issues with which we are faced, it is also very important to foster a sense of love and joy for the environment. At its core, recreation activities are intended to create a sense of community within the city through fun, creativity, and physical activity. Much of these activities can be done outdoors. We are very lucky to be surrounded by so much natural beauty. Below are a few ideas to promote a sense of love over the environment.

<u>Growing in the City</u> Location: Victoria, British Columbia

The city of Victoria offers many different urban agricultural initiatives to promote food literacy and sustainable growth of produce. There are beginner programs available for all ages, in addition to seasonal cooking classes to encourage use of produce that is grown in season. There is programming available for all kinds of urban gardening, whether people have a backyard, balcony, windowsills, or indoor spaces.

Inclusive Playgrounds Location: Portland Oregon

Portland Parks and Recreation has a list of all the accessible playgrounds across the city that have accessible features compared to standard structures. The promotion of these facilities is to offer children of all abilities the opportunity to benefit from spending time outdoors.

Kayaking and Canoeing Location: Burnaby, British Columbia

Burnaby Parks and Recreation offers day trips for kayaking and canoeing adventures. Some are offered within proximity to recreation facilities, while others are offsite. These trips offer an affordable opportunity for people to enjoy the outdoors with fellow community members.

Movies in the Park Location: Vancouver and Seattle

Cities including Vancouver and Seattle offer a host of free outdoor movies at different parks across the city. It promotes people to spend time outside and enjoy the nice weather in an inclusive atmosphere.

"Substantial evidence from observational and intervention studies indicates that overall time spent in nature leads to increased perceived value for connectedness to nature and, subsequently, greater pro-environmental attitudes and behaviours" (Deville & Tomasso et al pg.13, 2021).

Enjoying Outdoor Space

<u>Sounds of Summer</u> Location: Surrey, British Columbia

Sounds of the Summer is an ongoing event run by Recreation Surrey where free outdoor concerts are offered at parks across the city. People are encouraged to bring their own picnics and seating to gather with groups of friends and family.

<u>Urban Anglers</u> Location: San Francisco

San Francisco Recreation and Parks runs a sustainable fishing program called Urban Anglers. The five-week program teaches participants about the local ecosystem while enjoying the recreational aspects of the activity. The course is offered primarily to children, but also available for adults.

<u>Wildlife Photography</u> Location: Kamloops, British Columbia

Kamloops offers an afternoon workshop by a professional wilderness photographer where participants are taught how to use their cameras to capture the best shots, as well as how to navigate shooting photos outdoors.



Enjoying Outdoor Space
Engaging in Urban Ecological Restoration and Conservation

Urban Ecological Restoration and Conservation is not a just that has to be left to professionals and academic researchers. There are a variety of different opportunities for people to become involved in supporting both the functioning and conservation of local ecosystems. See the initiatives below for examples of conservation and restoration efforts that unite communities.

<u>Bird Feeder Making</u> Location: Portland Oregon



Portland Parks and Recreation hosts a bird feeder making session for community centre patrons to bring home and support local species of birds.

<u>Care for Urban Forest Volunteer Program</u> Location: Surrey, British Columbia

Surrey Parks and Recreation invites community members to "volunteer to care for [the forests] by removing invasive plants, planting trees, improving tree wells and more".

"Surrey's urban forest has over 80,000 street trees and 3,800 acres of natural areas".

Garbage Cleanups Location: Various CCAs



CCAs across the city organize local waste and garbage clean ups. Some are weekly events hosted by the CCAs.

<u>Habitat Restoration</u> Location: San Francisco, California

There are many opportunities to volunteer with parks conservancy in San Francisco. Volunteers can choose from a variety of different initiatives including habitat restoration and invasive plant patrol. Activities include invasive plant removal, winter planting, litter removal, seed collection, fence construction, trail maintenance, and plant monitoring.

Intro to Wildfire Fuel Management Location: Kamloops

In response to the increased amount of wildfires BC has experienced of the past several years, Kamloops recreation runs a morning-long workshop about how to prevent wildfires. The workshop teaches participants "about the wildfire and natural disturbance regimes, the purpose of fuel management, and what it entails".

Engaging in Urban Ecological Restoration and Conservation

Invasive Plant Walks Location: Kamloops, British Columbia

The Invasive Plant Walks offered through Kamloops recreation is a morning-long workshop that teaches participants the difference between a plant and a weed, how to identify when a weed is invasive, as well as the overall impact of invasive species on local ecosystems.

<u>Nature Work Parties</u> Location, Surrey, British Columbia

Recreation Surrey gathers on a regular basis for 'Nature Work Parties' to address imminent conservation efforts. Volunteers are trained and provided with the necessary tools.

<u>Urban Bee Keeping</u> Location: Burnaby, British Columbia

Bees are essential to supporting sustainable food systems. Burnaby Parks and Recreation provide workshops and programs related to urban bee keeping for all ages.



Engaging in Urban Ecological Restoration and Conservation

Upholding a Climate Justice-Oriented Approach

A sustainable future will not be achieved until equity issues with respect to the environment are addressed. Those living in marginalized communities tend to bear disproportionate severity of environmental risks and harms. In cultivating pro-environmental attitudes among Vancouver community centre patrons, equity concerns must be top of mind. Sustainability initiatives are now better incorporating issues of environmental justice, particularly those entangled with Indigenous justice.

Environmental Justice Salons ⁴ Location: Seattle, Washington



University of Washington's Earthlab hosts regular 'Environmental Justice Salons" which provide "a venue to share insights with a broad audience...to start a much-needed cross-disciplinary conversation on the question 'what does it mean to center equity and justice in environmental work?". Salons feature guest speakers of those leading environmental justice initiatives. Events are hosted both online and in-person and are well attended by the university community.

Indigenous Climate Action Network Location: Locations across Canada

Indigenous Climate Action Network offers a series of events, both online and in person, in addition to their advocacy work. Some of the themes addressed in their events are those related to greenwashing of corporate entities, Indigenous research methods, and climate justice. The network also organizes Walks for Justice for various Indigenous causes. The Network is led by brilliant Indigenous leaders advocating for Climate Justice. The network mobilizes around five key pathways to support their initiatives: Gatherings, Resources and Training, Amplifying Voices, Sovereignty & Self Determination, and Healing Justice.

<u>Literacy for Environmental Justice</u> Location: San Francisco Bay Area

Literacy for Environmental Justice (LEJ) aims to educate local communities about environmental justice concerns. The group is comprised of "multi-generational and multi-cultural cohort of youth, volunteers, supporters, environmental educators, habitat restoration specialists, community organizers and social justice advocates". LEJ facilitates programming for different groups, including "corporate, school and other organizations for full day or half day volunteer programs".

"Globally, Indigenous peoples are among those most affected by climate change (Tsosie 2007; United Nations 2007). Yet, we are also innovators in how to live lowemissions lifestyle"

(Sarah Hunt / Tłaliłila'ogwapg. 135, 2021)

Upholding a Climate Justice-Oriented Approach

Organizing People/Activating Leaders Location: Portland, Oregon

Organizing People/Activating Leaders (OPAL) is a grassroots organization based out of Portland. OPAL's "work is at the intersection of environmental justice, civil rights, and transportation and housing". They have had much success in their advocacy towards the government to respect the rights of marginalized communities and enact policies to address the climate crisis in an equitable way.

"Indigenous peoples have witnessed continual ecosystem and species collapse since the early days of colonial occupation...We should be thinking of climate change as part of a munch longer series of ecological catastrophes caused by colonialism and accumulation-based society"

(From: 'As We Have Always Done', by Leanne Betasamosake Simpson 2017).

It is important to note that "when we look across academic, activist and policy literatures, we do not readily find one agreed definition of environmental justice being used, but rather multiple alternatives" (Brown pg. 8 2022). Some definitions are human-focused, while other or equally concerned with justice to all living beings. Some definitions generalize that justice must be granted to all, while other definitions make specific reference over "race..national origin, or income" (Brown pg.8, 2022). While there tend to be some unifying features of environmental justice definitions, they change depending on the goals of the organization. The perspectives on this definition may shift depending on the organization/stakeholder/institution involved, as may be demonstrated in the examples above. It is important to centre the voices and experiences of those most affected when addressing climate injustices.



Upholding a Climate Justice-Oriented Approach

Inspiring Environmental Leadership

There are groups of incredible leaders in our community charting a sustainable future. People are working tirelessly to advocate for policy changes to prevent catastrophic climate change. There are organizations and initiatives for all to get involved in developing solutions, some of which are even hosted at Vancouver community centres. See the examples below for ideas about what environmental leadership looks like at the grassroots level.

<u>Force of Nature Alliance</u> Location: Lower Mainland, Vancouver, British Columbia

The Force of Nature Alliance, or FoN, is "part of a growing grassroots movement to transform the Lower Mainland into Canada's first ever zero carbon metropolis". The organization is comprised of volunteers from different Local Community Action Team (CATs). Each CAT is responsible for planning and executing "high-impact, locally relevant campaigns on issues like green buildings, renewable energy and public transportation". They have had great success in their various campaigns which include pushing cities to construct low emission buildings, promoting car-free streets, and encouraging municipalities to update emission targets.

<u>Trout Lake Green Committee</u> Location: Vancouver, British Columbia



The Trout Lake Green Committee meets monthly about how the community can collectively

tackle climate change and ensure that their programming minimizes environmental impacts.

Youth Climate Ambassadors Project Location: Vancouver

The Youth Climate Ambassadors Project "trains university student facilitators to help emerging high school leaders realize" the power of collective action in addressing the climate crisis. Youth are offered the opportunity to engage in conversations surrounding climate change from an equity-focused perspective and are taught how to gradually shift our systems away from those that are harmful to the environment.

Youth Stewardship Squad Location: Surrey, British Columbia

Surrey's Youth Stewardship Squad is "a group of youth between the ages of 14 and 18 who help youth speak up and have their voices heard with the support of the city of Surrey". An annual forum is hosted by the council to encourage dialogue about climate change and to implement solutions that are readily available.

Inspiring Environmental Leadership

"Keep going, don't look back, and if you have an idea, just do it; no one is going to wait for you or tell you what to do, use your voice and speak up for the planet" (Autum Peltier, 2019)



Inspiring Environmental Leadership

Conclusion

The purpose of this library is to provide a resource to Community Centre programming staff and Associations. This resource will be used to design and implement environmental action programs that meet the needs and interests of their local community and to assist in addressing environmental issues at the grassroots level. As indicated throughout the document, there are a variety of different ways individuals can be engaged. It is hopeful that through environmental programming, communities are empowered to act.



HANK

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