

Natural Science and Education Committee was held via videoconference on Monday April 4, 2022. Chair Cameron called the meeting to order at 6:38PM.

PRESENT Stan Cameron, Chair

Alissa Gallizzi Nadeem Mahmood Sam Matrosov Connie Tang

Garry Tanuan (arrived 6:56PM)

Thomas Thomas Jennifer Wigston Manna Wong

ABSENT Xiao Han

1. ACKNOWLEDGEMENT OF INDIGENOUS TERRITORY

The Chair recited the Acknowledgement of Indigenous Territory.

- 2. APPROVAL OF MINUTES OF MEETING HELD ON FEBRUARY 7, 2022
- 2.1 Minutes Link

RES.#NSEC 9/22

Moved By Manna Wong

THAT the meeting minutes from February 7, 2022, be approved.

Carried

- 3. ITEMS FOR ACTION OF THE NATURAL SCIENCE AND EDUCATION COMMITTEE
- 3.1 ESTABLISHMENT OF NATURAL SCIENCE AND EDUCATION STAFF WORKING TABLE

RES.#NSEC 10/22

Moved By Thomas Thomas

WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a

Multi-stakeholder Natural Science and Education Committee, as a subcommittee of TRCA's Board of Directors:

AND WHEREAS the Natural Science and Education Committee has been convened to study and make recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area:

AND WHEREAS the establishment of a Staff Working Table was identified in the 2022 workplan of the Natural Science and Education Committee;

THEREFORE LET IT BE RESOLVED that the attached Terms of Reference for the establishment of a Natural Science and Education Staff Working Table be approved.

Carried

3.2 POLICY SCAN AND ACCESS STANDARDS FOR OUT-OF-CLASSROOM LEARNING

RES.#NSEC 11/22

Moved By Sam Matrosov

WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a Multi-stakeholder Natural Science and Education Committee, as a subcommittee of TRCA's Board of Directors;

AND WHEREAS the Natural Science and Education Committee has been convened to study and make recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area;

THEREFORE LET IT BE RESOLVED THAT the following report on existing school board policies related to out-of-classroom learning specific to natural science, conservation and the environment;

AND draft recommended minimum standards of student access contained in this report be considered by the Natural Science and Education Committee at its Leadership Session and in further consultations with stakeholders;

AND FURTHER THAT staff report back to the Natural Science and Education Committee at its June 6, 2022 meeting on a final draft set of minimum standards of student access for consideration as a recommendation to the TRCA Board, Province, and partner School Boards.

Carried

4. NEW BUSINESS

Discussion was held around members comfort in attending an in-person meeting for June. Staff will discuss the ability to host a hybrid meeting at the TRCA office and provide some options for incorporating future on-location meetings at various facilities.

5. ADJOURNMENT

ON MOTION from Connie Tang, the meeting was adjourned at 7:12F	ON	1 MOTION	N from Connie	Tang, the	meeting wa	s adjourned	at 7:12P
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Chair		



Natural Science and Education Committee Meeting #1/22 was held by video conference on Monday February 7, 2022, pursuant to section C.12 of the TRCA's Board of Directors Administrative By-Law. Darryl Gray, Director of Education and Training in the role of Acting Chair called the meeting to order at 6:35p.m.

PRESENT

Stan CameronChair ElectAlissa GallizziMemberXiao HanMemberSam MatrosovMemberConnie TangMemberGarry TanuanMemberThomas ThomasMember

Jennifer Wigston Vice Chair Elect

Manna Wong Member

ABSENT

Nadeem Mahmood Member

Acting Chair Darryl Gray recited the Acknowledgement of Indigenous Territory.

ANNUAL/INAUGURAL MEETING Darryl Gray, Director of Education and Training at Toronto and Region Conservation Authority assumed the role of Acting Chair for the purpose of election of officers, in accordance with the TRCA Board of Directors Administrative By-law.

APPOINTMENT OF SCRUTINEERS

RES.#NSEC1/22 - APPOINTMENT OF SCRUTINEERS

Moved by: Connie Tang Seconded by: Thomas Thomas

THAT Joanne Jeffery, Senior Manager of Education and Training, TRCA and Adrian O'Driscoll, General Manager of the Kortright Centre for Conservation, TRCA be appointed as scrutineers for the election of officers of Toronto and Region Conservation Authority Natural Science and Education Committee.

CARRIED

ELECTION OF OFFICERS

CHAIR OF NATURAL SCIENCE AND EDUCATION COMMITTEE

Xiao Han nominated Stan Cameron for Chair. Stan Cameron indicated that he would stand for the position of Chair.

RES.#NSEC2/22 - MOTION TO CLOSE NOMINATIONS

Moved by: Garry Tanuan Seconded by: Connie Tang

THAT nominations for the Office of Chair of the Toronto and Region Conservation Authority Natural Science and Education Committee be closed.

CARRIED

Stan Cameron was declared elected by acclamation as the Chair of the Natural Science and Education Committee.

VICE CHAIR OF NATURAL SCIENCE AND EDUCATION COMMITTEE

Garry Tanuan nominated Jennifer Wigston for Vice Chair. Jennifer Wigston indicated that she would stand for the position of Vice Chair.

RES.#NSEC3/22 - MOTION TO CLOSE NOMINATIONS

Moved by: Garry Tanuan Seconded by: Alissa Gallizzi

THAT nominations for the office of Vice Chair of the Toronto and Region Conservation Authority Natural Science and Education Committee be closed.

CARRIED

Jennifer Wigston was declared elected by acclamation as the Vice-Chair of the Natural Science and Education Committee.

PRESENTATIONS

ector, Education and Training, TRCA, in regard to Item 9. Science and Education Committee.	2 -
PRESENTATIONS	
Garry Tanuan	
Xiao Han	
ted presentation 7.1 be received.	CARRIED
	PRESENTATIONS Garry Tanuan Xiao Han

7.2. Darryl Gray, Director, Education and Training, TRCA, in regard to Item 10.1 - Summary Report on Outdoor Education System and Centres.

RES.#NSEC5/22 - PRESENTATIONS

Moved by: Thomas Thomas

Seconded by: Manna Wong

THAT the above-noted presentation 7.2 be received.

CARRIED

Items for the Action of the Natural Science and Education Committee

RES.#NSEC6/22 - 2022 NATURAL SCIENCE AND EDUCATION COMMITTEE MEETING SCHEDULE

Moved by: Connie Tang Seconded by: Manna Wong

THAT the following 2022 meeting schedule be approved:

Monday, February 7, 2022 Monday, April 4, 2022 Monday, June 6, 2022

CARRIED

BACKGROUND AND RATIONALE

As some members of NSEC participate in various boards and committees, staff have proposed the following meeting dates after consulting the Board of Trustees meeting calendars for local school boards in TRCA's jurisdiction.

All meetings will be held at 6:30 p.m. Due to the current outbreak of novel coronavirus (COVID-19), because no TRCA facility can currently accommodate meetings while ensuring proper physical distancing measures, it is currently expected that meetings will be held virtually pursuant to section C.12 of the TRCA's Board of Directors Administrative By-Law. If the outbreak is resolved or TRCA is able to identify a safe method of conducting in-person meetings, while following all local public health recommendations, meetings may resume at TRCA's Head Office at 101 Exchange Avenue.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 7 - Build partnerships and new business models

Strategy 6 - Tell the story of the Toronto region

Report prepared by: Daniel Ruberto, extension 6445

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For Information contact: Daniel Ruberto, extension 6445

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Date: November 12, 2021

Items for the Action of the Natural Science and Education Committee

RES.#NSEC7/22 - OVERVIEW OF NATURAL SCIENCE AND EDUCATION COMMITTEE

Moved by: Garry Tanuan Seconded by: Xiao Han

WHEREAS at Meeting #16/18 held on July 20, 2018, TRCA's Board of Directors approved the establishment of a multi-stakeholder Outdoor Education Task Force comprised of elected officials from local school boards and TRCA's Board of Directors;

AND WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a Multi-stakeholder Natural Science and Education Committee, as a sub-committee of TRCA's Board of Directors;

AND WHEREAS as its Meeting #9/21 held on November 19, 2021, representatives from area school board Boards of Trustees and TRCA's Board of Directors have been duly appointed;

THEREFORE LET IT BE RESOLVED THAT the staff presentation on the Natural Science and Education Committee be received;

THAT the following Mandate of the Natural Science and Education Committee be endorsed:

Study and make recommendations to the Board of Directors of TRCA regarding recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area region.

THAT the following Objectives of the Natural Science and Education Committee be endorsed:

Outdoor Education Task Force Recommendation #2: Establish Consistent Access and Curricular Standards Across TRCA and School Boards

Outdoor Education Task Force Recommendation #3: Establish a Unified Performance Measurement System

Outdoor Education Task Force Recommendation #4: Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System

Outdoor Education Task Force Recommendation #5: Develop a Long-Term Equitable Access Financial Plan

AND FURTHER THAT the 2022 Natural Science and Education Committee Work Plan and

CARRIED

BACKGROUND

Outdoor Education Task Force

At Meeting #6/18 on July 20, 2018, Toronto and Region Conservation Authority's (TRCA) Board of Directors approved the establishment of an Outdoor Education Task Force comprised of Trustees from area school boards and representatives from TRCA's Board of Directors. The Outdoor Education Task Force was convened with an eighteen (18) month term and mandate to study, develop, and recommend strategic future directions related to out-of-classroom learning as it pertains to natural science, conservation and the environment in the Greater Toronto Area (GTA), specifically including Peel, York and Durham Regions and the City of Toronto.

TRCA's Board of Directors convened the Outdoor Education Task Force as a multi-stakeholder approach to identifying opportunities that will sustain the current system of publicly built and operated school board and conservation authority out-of-classroom learning centres and programs into the future.

The Outdoor Education Task Force was comprised of the following School Board Trustees and TRCA Board members:

- Durham Catholic District School Board: Trustee Morgan Ste. Marie
- York Region District School Board: Trustee Cynthia Cordova
- York Catholic District School Board: Trustee Jennifer Wigston
- Peel District School Board: Trustee Will Davies
- Dufferin-Peel Catholic District School Board: Trustee Frank Di Cosola
- Toronto District School Board: Trustee Anu Sriskandarajah
- Toronto Catholic District School Board: Trustee Garry Tanuan
- Conseil scolaire catholique MonAvenir: Chair Melinda Chartrand
- TRCA (City of Brampton): Regional Councillor Rowena Santos
- TRCA (City of Toronto): Mr. Basu Mukherjee

On January 25, 2021 the Outdoor Education Task Force completed its work and submitted a Vision Statement and Strategic Recommendations for review and endorsement by TRCA's Board of Directors (Attachment #1: Final Report: Vision Statement and Strategic Recommendations of Outdoor Education Task Force, and Attachment #2: Toronto and Region Conservation Authority Outdoor Education Task Force Vision Statement). The Outdoor Education Task Force Vision Statement and Strategic Recommendations form the basis for strengthened collaboration amongst and between TRCA and area school boards as well as other learning organizations within the broader public sector. A key goal of the Outdoor Education Task Force was to build on Section 197 of the Education Act, which provides for partnerships between school boards and conservation authorities related to natural science and conservation education activities, and establish mechanisms to better leverage the public learning assets and natural resources of both school boards and conservation authorities while maximizing the use of finite financial public and private funding in delivering important nature-based out-of-classroom learning experiences for students of GTA watersheds and school boards.

TRCA's Board of Directors, at its meeting held on February 26, 2021, adopted Resolution #A17/21 as follows:

WHEREAS at its Meeting #6/18 held on July 20, 2018, Toronto and Region Conservation Authority Board of Directors approved the establishment of an Outdoor Education Task Force comprised of elected officials from local school boards and TRCA's Board of Directors:

AND WHEREAS the Outdoor Education Task Force has been convened to study, develop and recommend strategic future directions related to natural science, conservation and environmental out-of-classroom learning in the Toronto region;

AND WHEREAS at Meeting #5/20 held on January 25, 2020, the Outdoor Education Task Force endorsed the final report, Vision Statement and Strategic Recommendations, as amended, for submission to Toronto and Region Conservation Authority Board of Directors;

THEREFORE, LET IT BE RESOLVED THAT the final report of the Outdoor Education Task Force be received:

THAT the Vision Statement, as amended at the January 25, 2021 Outdoor Education Task Force meeting, be endorsed;

THAT the following recommendations of the Outdoor Education Task Force be approved for action:

Recommendation #1: Establish Shared Governance Model – Natural Science and Education Committee as a Subcommittee of Toronto and Region Conservation Authority's Board of Directors

Recommendation #2: Establish Consistent Access and Curricular Standards Across TRCA and School Boards

Recommendation #3: Establish a Unified Performance Measurement System

Recommendation #4: Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System

Recommendation #5: Develop a Long-Term Equitable Access Financial Plan

THAT the approved Vision Statement and Strategic Recommendations be circulated to area Boards of Trustees for consideration and endorsement;

TRCA's Role in Outdoor Education

TRCA has worked with local schools and school boards to provide outdoor education programs and services since 1953. Enabling this work, Section 197 of the *Education Act* provides for school boards to enter into agreements with conservation authorities for the purposes of providing out-of-classroom learning related to natural science, conservation or other out-of-classroom programs. Currently TRCA is one of Ontario's largest providers of out-of-classroom experiential learning with over 155,000 students engaging in TRCA learning programs annually through a network of education centres, conservation areas and local greenspaces, in addition

to in-school programs. TRCA educational offerings are curriculum-linked and enable student learning related to a wide range of subjects that meet curricular objectives while advancing TRCA strategic goals and supporting TRCA's core mandate.

Further to out-of-classroom learning experiences and program services, TRCA provides access to TRCA lands and greenspaces for area school boards for board-operated outdoor education centres through lease or other formal agreements either on, or adjacent, to TRCA-owned land, thereby maximizing public-sector partnerships through efficient use of publicly owned land for natural science, conservation and environmental learning purposes.

Natural Science and Education Committee

Central to the Outdoor Education Task Force recommendations was the establishment of the Natural Science and Education Committee as a standing committee of TRCA's Board of Directors to provide a shared governance framework that advances the recommendations of the Outdoor Education Task Force. TRCA has historically brought key stakeholders together as necessary for important discussions related to the segment of the formal education system that relates to natural science, conservation and the environment, most recently through the Outdoor Education Task Force. The convening of the Natural Science and Education Committee was seen as an essential component of TRCA's work as a leader in this field by members of the Outdoor Education Task Force. To this end, at TRCA's Board of Directors Meeting held on May 28, 2021, RES.#A107/21 was approved, in part, as follows:

...THAT the Natural Science and Education Committee be established;

...THAT a formal request for representation on the Natural Science and Education Committee be made to member organizations.

In order to ensure representation from key public-sector stakeholders, membership of the Natural Science and Education Committee is to be comprised of representatives from the following:

- (a) School Board Trustee from each of the area school boards (up to 10);
- (b) TRCA Board of Directors Member (up to 2);
- (c) Ministry of Education (up to 2);
- (d) Indigenous representatives with a Treaty right or historical affiliation to TRCA's jurisdiction (up to 2);
- (e) Youth representatives (up to 2) attending an educational institution in TRCA's jurisdiction.

Following approval of the establishment of the Natural Science and Education Committee by TRCA's Board of Directors, requests for appointment for School Board Trustees were circulated to area school boards, and a call for applications for Youth Representatives was released. At TRCA Board of Director's meeting held on November 19, 2021, the following appointments were confirmed for the Natural Science and Education Committee:

School Board Trustees:

Mr. Stan Cameron, Peel District School Board

Mr. Nadeem Mahmood, York District School Board

Mr. Garry Tanuan, Toronto Catholic District School Board

Ms. Jennifer Wigston, York Catholic District School Board Ms. Manna Wong, Toronto District School Board

Youth Representatives:

Ms. Alissa Gallizzi Mr. Sam Matrosov

TRCA Board Members:

Ms. Xiao Han Ms. Connie Tang

At the same TRCA Board of Directors meeting, staff were delegated authority to confirm any further appointments to the Committee, and subsequently, staff received appointments from the following:

Mr. Thomas Thomas, Dufferin-Peel District School Board

TRCA staff are continuing to work with indigenous communities and the Ministry of Education to secure representation on the Natural Science and Education as outlined in the Terms of Reference and will report back to both TRCA's Board of Directors and the Natural Science and Education Committee with updates as appropriate.

RATIONALE

Building on the outcomes and recommendations of the Outdoor Education Task Force, the Natural Science and Education Committee provides a multi-stakeholder governance framework to advance shared objectives pertaining to out-of-classroom learning related to natural-science, conservation and the environment in the Greater Toronto Area. There is currently no formalized collaborative mechanism to foster, develop and strengthen partnerships between school boards and conservation authorities to support and enhance student learning in the out-of-doors. By bringing together key stakeholders, including TRCA, area school boards, the Ministry of Education, indigenous communities and youth, TRCA and school board partners will be better able to leverage the value of the publicly built and operated system that supports out-of-classroom learning related to natural science, conservation and the environment more effectively, while also ensuring the current and future learning needs are met.

As an advisory board of TRCA's Board of Directors, the Natural Science and Education Committee has a mandate to:

Study and make recommendations to the Board of Directors of TRCA regarding recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area region.

The objectives of the Natural Science and Education Committee are to advise TRCA and partner agencies on the effective implementation and advancement of the recommendations of the Outdoor Education Task Force, specifically the following:

- (a) Establish Consistent Access and Curricular Standards Across TRCA and School Boards.
- (b) Establish a Unified Performance Measurement System.
- (c) Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System.
- (d) Develop a Long-Term Equitable Access Financial Plan.

To align with municipal and school board election cycles, committee members have been appointed for the remainder of the municipal council and school board terms. Following the 2022 election cycle, members of the Committee will be appointed for a four-year term aligned with municipal and school board Terms of Council or until their successors are appointed, with meetings held, at minimum, three times per year.

2022 Activities and Meeting Formats

Recognizing that municipal and school board elections are scheduled for Monday, October 24, 2022, work related to the current term of the Natural Science and Education Committee will focus on setting broad objectives for the Natural Science and Education Committee in alignment with the recommendations of the Outdoor Education Task Force, establishing a Terms of Reference for a staff working table comprised of representatives from member organizations and supporting the resumption of out-of-classroom learning during and following the COVID-19 pandemic, as appropriate.

The Natural Science and Education Committee will meet three (3) times in 2022, as outlined below. The following meeting schedule has been set based on current Board of Trustee and Municipal Council schedules.

Monday, February 7, 2022 Monday, April 4, 2022 Monday, June 6, 2022

Meetings of the Natural Science and Education Committee will consist of two sessions: a Governance Session focused on the business and activities of the Committee followed by a Leadership Session, which functions as a workshop for the Committee to have open discussions related to the specific actions of the Committee that inform staff reports. Governance Sessions will be Chaired by a duly elected member of the Natural Science and Education Committee, while Leadership Sessions will be facilitated either by TRCA staff or external consultants as required.

As an advisory board of TRCA's Board of Directors, the Natural Science and Education Committee will report to TRCA's Board of Directors with minutes and action items circulated to participating member organizations as required.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 – Rethink greenspace to maximize its value

Strategy 5 - Foster sustainable citizenship

Strategy 6 - Tell the story of the Toronto region

Strategy 7 - Build partnerships and new business models

DETAILS OF WORK TO BE DONE

TRCA staff have prepared a Draft Agenda Framework and Work Plan for the three meetings of 2022 that outlines key milestones and deliverables, including timelines and a schedule for reporting to TRCA's Board of Directors and participating Boards of Trustees.

Meeting #1 – February 7, 2022

Governance Session

Election of Chair and Vice-Chair

Presentations:

- Overview of Natural Science and Education Committee
 - Attendees
 - Role of TRCA
 - Background
 - Goals and Objectives
- Overview of Current Outdoor Education System

Reports:

- 2022 Meeting Dates
- Overview of Natural Science and Education Committee
- Overview of Current Outdoor Education System

Leadership Session

- Facilitated Discussion re: Establishment, Role and Composition of Staff Working Table
- Staff Direction and Recommendations

Minutes to TRCA Board of Directors and participating Boards of Trustees: March 2022

Meeting #2 – April 4, 2022

Governance Session

Presentations:

Role, Composition and Function of Staff Working Table

Reports:

- Report on Terms of Reference for Staff Working Table
- Report on COVID-19 Recovery and Resumption of Out-of-Classroom Learning

Leadership Session

- Facilitated session on Objectives and Goals of Natural Science and Education Committee (Short, Medium, Long Term), including Interim Actions.
- Staff Directions and Recommendations

Minutes to TRCA Board of Directors and participating Boards of Trustees: May 2022

Meeting #3 – June 6, 2022

Governance Session

Presentations:

 Presentation on Outcomes of Leadership Session on Objectives and Goals of Natural Science and Education Committee

Reports:

- Report on Outcomes of Leadership Session on Objectives and Goals of Natural Science and Education Committee
- Proposed Interim Work Plan for June 2022 to February 2023.

Leadership Session

To be determined

Minutes to TRCA Board of Directors and participating Boards of Trustees: September 2022

Report prepared by: Darryl Gray, (416) 791-0327

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For Information contact: Darryl Gray, (416) 791-0327

Emails: darryl.gray@trca.ca Date: January 14, 2022

Attachments: 2

Attachment 1: Final Report: Vision Statement and Strategic Recommendations of Outdoor Education Task Force

Attachment 2: Toronto and Region Conservation Authority Outdoor Education Task Force

Vision Statement 2021

Items for the Action of the Outdoor Education Task Force

TO: Chair and Members of the Outdoor Education Task Force

Meeting #5/20, Monday, January 25, 2021

FROM: Darryl Gray, Director, Education and Training

RE: FINAL REPORT: VISION STATEMENT AND STRATEGIC

RECOMMENDATIONS OF THE OUTDOOR EDUCATION TASK FORCE

KEY ISSUE

Approval of the final report of the Outdoor Education Task Force, including Vision Statement and Strategic Recommendations.

RECOMMENDATION

WHEREAS at its Meeting #6/18 held on July 20, 2018, Toronto and Region Conservation Authority Board of Directors approved the establishment of an Outdoor Education Task Force comprised of elected officials from local school boards and TRCA's Board of Directors;

WHEREAS the Outdoor Education Task Force has been convened to study, develop and recommend strategic future directions related to natural science, conservation and environmental out-of-classroom learning in the Toronto region;

WHEREAS the Outdoor Education Task Force, as facilitated by I-THINK, participated in a series of workshops for the purposes of developing a Draft Statement related to out-of-classroom learning;

AND WHEREAS at Meeting #4/20 held on November 30, 2020, the Outdoor Education Task Force endorsed the preliminary Vision Statement and Strategic Recommendations for circulation and review;

AND WHEREAS Outdoor Education Task Force members and TRCA staff have recommended and made additional adjustments since the November 30, 2020 Outdoor Education Task Force meeting;

THEREFORE LET IT BE RESOLVED THAT the Vision Statement be endorsed;

THAT the following recommendations of the Outdoor Education Task Force be approved for submission to Toronto and Region Conservation Authority Board of Directors:

Recommendation #1: Establish Shared Governance Model – Natural Science and Education Committee as a Subcommittee of Toronto and Region Conservation Authority's Board of Directors

Recommendation #2: Establish Consistent Access and Curricular Standards Across TRCA and School Boards

Recommendation #3: Establish a Unified Performance Measurement System

Recommendation #4: Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System

Recommendation #5: Develop a Long-Term Equitable Access Financial Plan

THAT the approved Vision Statement and Strategic Recommendations be circulated to area Boards of Trustees for consideration and endorsement:

THAT TRCA staff be requested to present to participating Boards of Trustees, the Province of Ontario and other stakeholders, organizations or community partners the final Vision Statement and Strategic Recommendations of the Outdoor Education Task Force:

AND FURTHER THAT the final report of the Outdoor Education Task Force be submitted to TRCA's Board of Directors for recommended adoption and action as necessary.

BACKGROUND

The Outdoor Education Task Force (OETF) was established at Meeting #6/18 on July 20, 2018 by Toronto and Region Conservation Authority (TRCA) Board of Directors with an eighteen (18) month mandate to study, develop, and recommend strategic future directions related to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area (GTA), specifically including Peel, York and Durham Regions and the City of Toronto.

The OETF is comprised of Trustees appointed from area school boards and members of TRCA's Board of Directors, including the following:

- Durham Catholic District School Board: Trustee Morgan Ste. Marie
- York Region District School Board: Trustee Cynthia Cordova
- York Catholic District School Board: Trustee Jennifer Wigston
- Peel District School Board: Trustee Will Davies
- Dufferin-Peel Catholic District School Board: Trustee Frank Di Cosola
- Toronto District School Board: Trustee Anu Sriskandarajah
- Toronto Catholic District School Board: Trustee Garry Tanuan
- Conseil scolaire catholique MonAvenir: Chair Melinda Chartrand
- TRCA (City of Brampton): Rowena Santos
- TRCA (City of Toronto): Basu Mukherjee

At OETF Meeting #1/19 held on October 17, 2019, the OETF approved a workplan that included the following:

- Develop a framework for the long-term provision of out-of-classroom learning experiences related to natural science, conservation and the environment that meets the needs of the student population to the year 2040;
- Provide recommendations to strengthen and enable partnerships and collaboration between public sector agencies that maximize the use and value of public assets and infrastructure;
- Provide expertise and recommendations on strengthening experiential connections

between the urban and natural environments, with consideration for the impact of urban intensification on student access to greenspace and natural systems;

- Provide recommendations related to long-term financial sustainability, including, but not limited to:
 - Government funding programs;
 - Private grants, fundraising and endowments;
 - Alternative business models (co-operatives, social enterprises, etc.);
 - Other funding models.

Since its formation, the OETF has met five (5) times, participating in three (3) facilitated workshops facilitated by I-THINK and has been informed by ongoing research and information provided by TRCA staff, staff from participating school boards and OETF members. The three facilitated workshops focused on specific areas of strategic priority and provided an opportunity for OETF members to discuss emerging trends, data, student and school needs as well as overall opportunities for the out-of-classroom learning system. The facilitated workshops included:

- Workshop 1: Values and Destination Visioning
- Workshop 2: Models and Mechanisms
- Workshop 3: Recommendations, Framework and Policy Statements

Following the three facilitated workshops, at Outdoor Education Task Force Meeting #4/20 held on November 30, 2020 and conducted via video conference, OETF members reviewed a draft Vision Statement and Strategic Recommendations. The Vision Statement, prepared by I-THINK, is enclosed as *Attachment 1* and forms the basis of a long-term vision for Out-of-Classroom Learning.

Following the November 30, 2020 meeting, the draft Vision Statement and Strategic Recommendations were circulated to Task Force members for further review and comment. The Vision Statement, as developed by OETF members with I-THINK, is as follows:

We envision a future where:

The students of Ontario have consistent access to quality outdoor education.

Educators have the confidence and self-efficacy to make environmental stewardship a pillar of their classroom pedagogy.

Trustees, in partnership with parents and guardians, and in cooperation with TRCA, advocate for system change in how funds are allocated for outdoor education. Advocacy is targeted towards an ecosystem of funders, like the Ontario Ministry of Education, school boards, organizations like the OPSBA, OSTA-AECO, OCSTA, AFOCSC, and industry, with the goal of consistent funding to support long-term planning and a breadth of actions that will ensure flexibility for classrooms and whole boards in their delivery of outdoor education.

Community comes together to create a system of support ensuring impactful out-ofclassroom learning related to natural science, conservation and the environment.

Item 7.1

Environmental stewardship is rooted in a global, interconnected understanding that is introspective: building an appreciation for Indigenous knowledge and communities, and understanding the role of colonialism on our understanding, behaviours and relationship with the land.

Generations of environmental stewards are fostered, sparked, nourished and sustained with outdoor education experiences; contributing to a citizenry with a life-long appreciation for nature and land, and the agencies required to take actions to ensure a viable future for ourselves and the environment.

Based on the Vision Statement and the three workshops conducted by I-THINK with the OETF, the following themes emerged:

- 1. TRCA plays an integral role in providing leadership to the out-of-classroom learning system as it relates to natural science, conservation and the environment;
- 2. The student voice should be at the forefront of decision making, ensuring inclusion and equitable access;
- Achieving success in reimagining the out-of-classroom learning system is predicated on collaborative action, with TRCA seen as fulfilling the role of convenor in bringing together the range of stakeholders necessary to establish a supportive infrastructure of learning as well as perform a secretariat function;
- 4. Establishing performance measures and standards for the delivery of out-of-classroom learning is essential, including curricular expectations and indicators of success, as well as instituting foundational principles of equitable access and inclusion;
- 5. Improved student and community learning related to natural science, conservation and the environment requires multiple interventions, multiple entry points, and multiple pathways, including participating in out-of-classroom experiences such as field trips but also integration of all aspects of student life in school, out-of-school, and in the home to change knowledge, attitudes and behaviour.

Along with the realization of the above vision, it was recognized that for a successful reimagining of out-of-classroom experiences and the system necessary to support it, no single organization can, *or should*, assume full responsibility for its management, rather collaborative action amongst all public agencies, including school boards, conservation authorities and the Province of Ontario, as well as other agencies and organizations, is *required* to build a renewed system that supports student learning related to natural science, conservation and the environment. This acknowledgement of *required collaboration* forms the backbone of the following recommended elements of an Out-of-Classroom Learning Framework.

RATIONALE

Given the above, based on input from, and discussions with, the OETF and stakeholders, and ongoing research on best practices, TRCA staff prepared and circulated detailed recommended actions for endorsement by the OETF. These recommendations form the basis for a final report on the future provision of out-of-classroom learning related to natural science, conservation and the environment and reflect the enclosed I-THINK report and Vision Statement. Elemental to these recommendations is the recognition that and even stronger and more formalized collaboration amongst public agencies, such as school boards, conservation authorities and multiple Ministries at the Province of Ontario, is required. The strong collaboration amongst the OETF has provided a basis from which to further build and strengthen these partnerships.

Item 7.1

Recommendation #1: Establish Shared Governance Model – Natural Science and Education Committee as a Sub-Committee of TRCA Board of Directors

The OETF has highlighted the important role of shared governance in building a collaborative system that integrates collective decision-making and mutual accountability into the overall supporting infrastructure of out-of-classroom learning related to natural science, conservation and the environment. To this end, it is recommended that a standing committee of TRCA's Board of Directors be established with members appointed from area school boards, TRCA, the Ministry of Education and other leading science-based and education organizations, including post-secondary institutions and government agencies, such as Parks Canada (Rouge National Urban Park) and Toronto Zoo, where appropriate.

The role of the *Natural Science* and *Education Committee* is proposed to provide oversight and leadership to the system that supports out-of-classroom learning related to natural science, conservation and the environment within school boards, conservation authorities and other key stakeholders. The primary focus of Natural Science and Education Committee would be to support the operationalization of the recommendations and framework emanating from the OETF, while strengthening the overall connection between the science of conservation and environmental management and the formal and non-formal education systems.

Consideration should be given to integrating the youth voice into the Natural Science and Education Committee, including a clarifying definition of "youth". Options may include:

- Student Trustee appointment(s)
- Appointment of representative(s) from TRCA's Youth Council
- General call for applications for appointment

With approval of this recommendation, TRCA staff are prepared to develop a draft, detailed *Terms of Reference* for the Natural Science and Education Committee for consideration by the OETF, the Province of Ontario and other key stakeholders, and TRCA's Board of Directors.

Recommendation #2: Establish Access and Curricular Standards Across TRCA and School Boards

An early discussion point of the OETF was the recognition of inconsistency across school boards in the ability and capacity to deliver, or access, out-of-classroom learning related to natural science, conservation and the environment for students that meet curricular expectations. It was also identified that principles of inclusion and equity of access were integral to the strengthening of the out-of-classroom learning system and programs. To this end, it is recommended that standards be established that provide for a minimum base for out-of-classroom learning experiences related to natural science, conservation and the environment for students, and that these essential experiences be curriculum-linked and reflect the OETF expectations related to equitable inclusion and student-centred perspectives.

Several boards have adopted policies for access to out-of-classroom learning experiences based on curriculum and grade, which serves as a starting point for the development of overall standards. For example, YRDSB enables through policy the provision of outdoor education experiences for grades 2, 4 and 7 at YRDSB operated day centres. Within the scope of the Natural Science and Education Committee, a key activity will be to build on existing supportive policies and provide recommendations on a set of standards for the Greater Toronto Area that foster the framework for a multi-stakeholder approach to policy development for student access to out-of-classroom learning with sufficient flexibility to allow unique school board approaches to be in place. To this end, while providing general oversight and support for the continued

advancement and monitoring of standards and policies from a curricular and equitable access perspective, the Natural Science and Education Committee will function as a convenor of organizations to support continued policy development that meets the needs of local school boards within the broader system.

Additionally, OETF members acknowledged the importance of harmonizing policy and risk management practices to both ensure the overall safety of students accessing out-of-classroom learning related to natural science, conservation and the environment, as well as facilitating the ease of access for these experiences. Recognizing the diverse range of policies and procedures within school boards, it is recommended that further exploration be given to adopting existing standards or developing new uniform standards, to ensure consistency, accountability and transparency in the overall risk management and excursion approval framework.

Recommendation #3: Establish a Unified Performance Measurement System

Given the transformative nature of the recommendations related to the Outdoor Education Task Force, performance measurement is central to monitoring and reporting on progress relative to the broader framework supporting out-of-classroom learning related to natural science, conservation and the environment. Additionally, while there is an abundance of support for the benefits of outdoor education, there is limited empirical data as it pertains to the efficacy of outdoor education in the broadest sense, and more specifically, out-of-classroom learning related to natural science, conservation and the environment. For this reason, it is recommended that multiple streams of performance measures (quantitative and qualitative) be established for regular reporting, trend tracking and planning for participating agencies through the Natural Science and Education Committee via TRCA's Board of Directors. Measures and streams may include:

- General function and performance of out-of-classroom learning system, including the following potential sub-streams:
 - Total number of students participating in out-of-classroom learning experiences
 - Total number of learner hours of students participating in out-of-classroom experiences
 - Distribution of out-of-classroom learning experiences by students by school board based on student population
 - Total number of agreements established for the shared provision of out-ofclassroom learning experiences, including for both facility-based use and local greenspace access
- Curricular and learning outcomes measurement:
 - Assessment and reporting of environmental knowledge
- Financial performance and investment levels:
 - o Provincial funding allocation by student by school boards
 - Additional funding by student by school boards
 - o Funding by student by agencies, including conservation authorities
 - Leveraged, or non-school/non-student, revenue as a percentage of total operating budget, by facility and at an aggregate level
- Longitudinal studies on the impact of experiences within school years as well as postgraduation
- Perception of personal and community health and wellness as it relates to experiences in out-of-classroom learning

Item 7.1

Recommendation #4: Advance Shared-Ownership and Access Models That Enhance and Sustain Overall Out-Of-Classroom Learning System

To realize Recommendation #2 related to standards for access, a fundamental re-imagining of the overall ownership and administration of out-of-classroom learning is required. Historic models of board-owned assets being utilized exclusively by students from one particular school board should be adapted to reflect current and more recent practices related to shared use and shared access of schools and community facilities. Additionally, stronger linkages between local schools and local greenspace systems for curated or facilitated and teacher-led, out-of-classroom learning experiences will require improved integration between schools, school boards, conservation authorities and local municipalities. It is recommended that multi-partite agreements between area school boards, conservation authorities, partner agencies and municipalities be established that view the system as a whole, rather than as discrete parts, enabling improved and optimized use of both local education centres and greenspace systems.

Under S.197 of the *Education Act* (RSO 1990), school boards are enabled to enter into agreements with conservation authorities for the use of lands, buildings, and personnel for the purposes of providing natural science, conservation, or other out-of-classroom programs. Additionally, S.197 also contains provisions for two or more school boards to enter into agreements for the shared use and delivery of natural science programs and other out-of-classroom learning programs. It is through this legislation that the current system of natural science schools, outdoor education centres, environmental education centres and conservation field centres that facilitate student out-of-classroom learning has developed, and from which future agreements for the continued and expanded delivery of out-of-classroom learning experiences will emanate. This legislation provides the framework for shared ownership and shared delivery models that leverage the value of public assets, including buildings, personnel, and greenspace.

TRCA and local school boards have a strong history of shared use of facilities and greenspace for out-of-classroom learning experiences related to natural science, conservation and the environment specifically, as well as community use of assets and resources, such as schools, facilities and services, through multi-partite agreements. This shared history forms the foundation for a renewed approach to collaboration that optimizes use of public assets, including education centres, personnel and local greenspace, in a way that is centred on the student experience.

Taking an approach that allows for shared ownership or administrative models provides for balanced, equitable access across school boards, while improving the financial sustainability of the overall system. Further to this, TRCA, along with school boards and other partners, have excellent experience leveraging the value of existing facilities to create multi-use assets that improve overall use and performance of facilities, both programmatically and financially, as seen with schools, outdoor education centres and other public spaces. This experience in creating community hubs should be leveraged in reimagining how outdoor education centres are programmed and sustained into the future.

Examples of TRCA multi-partite agreements that enable out-of-classroom learning related to natural science, conservation and the environment include:

- Lake St. George Field Centre: Historically operated by TRCA under a multi-partite agreement with TDSB, TCDSB and YRDSB. (Humber River Watershed, York Region)
- Burlington Outdoor Education Centre: Owned and operated by YRDSB, with an agreement for use of adjacent greenspace owned by TRCA. (Humber River Watershed, York Region)

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Etobicoke Outdoor Education Centre: Owned and operated by TDSB, within TRCA's
Albion Hills Conservation Area, adjacent to TRCA's Albion Hills Field Centre, under a
40-year land lease with TRCA. Under the agreement, TRCA also provides food service
for TDSB students. (Humber River Watershed, Peel Region)

Examples of school board multi-partite agreements that enable efficient use of space and resources:

- City Place: Umbrella agreement for the creation of two elementary schools (TCDSB and TDSB) with City of Toronto adjacent to Canoe Landing Park and Canoe Landing Recreation Centre.
- Student Transportation Services of York Region: Amalgamated student transportation services for YRDSB and YCDSB. Governed by a separate standing committee of both boards.
- Flato Markham Theatre: Joint use agreement between City of Markham and YRDSB for use of Flato Markham Theatre as part of the Unionville Secondary School/Markham Civic Centre master plan. Includes provision for use of theatre, as well as a cost sharing mechanism related to heating and cooling and grounds maintenance.

Recommendation #5: Develop Long-Term Equitable Access Financial Plan

Stable, dedicated funding linked to a cohesive, coordinated plan for the provision of out-of-classroom learning related to natural science, conservation and the environment is critical to achieving the overall vision of the OETF. As per Recommendation #2, equitable and consistent access across all school boards is a key aspect of future collaborative work amongst stakeholder organizations, including school boards and conservation authorities. Furthermore, stable, strategically targeted funding with clear shared objectives pertaining to use will allow optimization of existing public assets, while protecting the current system from further loss of resources, such as closures. Funding for the purposes of supporting a resilient out-of-classroom learning system can be grouped into three categories:

- 1. Per student funding for out-of-classroom experiences at school board, conservation authority or other learning centres;
- Capacity-building and professional development for teachers to support improved learning related to natural science, conservation and the environment in local communities;
- 3. Capital funding to ensure the long-term viability of existing and new learning centres, with a particular emphasis on removing barriers and improving accessibility while advancing goals related to climate change mitigation and green buildings;

For the 2020/2021 school year, the Province of Ontario provided an Outdoor Education Allocation of \$17.7 million to school boards based on the following calculation:

• \$5,000 per school board + (\$8.51 x Average Daily Enrollment)

Based on early research conducted and reported at Outdoor Education Task Force Meeting #1/20 held on January 20, 2020, the use of this allocation is inconsistent, largely as a result of varying policy environments related to outdoor education between school boards, though school boards use the funds for similar purposes, including fees for field trip costs, transportation costs, teacher release time costs, student and teacher safety training for specific disciplines or courses and others. Additionally, several school boards provide top-up funding for certain elements of

their outdoor education program, however, this enhanced funding is not consistent across school boards.

As noted in Recommendation #4, the legislative opportunity under the Education Act for establishing mechanisms for the provision of out-of-classroom learning can leverage existing funding levels while streamlining access for students; with a diverse range of providers available for schools to access for learning experiences, a more coordinated approach across the sector would enhance opportunities for students while also ensuring strong value for both the school boards and Province of Ontario in use of public funding. Additionally, by providing standards and a more robust and harmonized policy environment across school boards, as per Recommendation #2, uniform use of the Outdoor Education Allocation by school boards would increase clarity and consistency between and across jurisdictions.

While a base level of funding that supports the strategic delivery of student experiences linked to overall standards is integral to the overall effectiveness of a region-wide approach to out-of-classroom learning, it is important to acknowledge the additional sources of funding that support student experiences, including user fees, community fundraising, school board and conservation authority fundraising and foundations, as well as others. To this end, it is recommended that the Natural Science and Education Committee, upon establishment, convene a working group to develop a detailed financial roadmap of existing funding models, including a gap and opportunity analysis for improved and consistent public and private funding to be communicated to TRCA Board of Directors, school boards and the Province of Ontario. Congruent to the roadmap, the working group should undertake an assessment of current cost structures for school board- and conservation authority-operated public learning assets to better understand the overall cost of delivery for the system to better match long-term costs with actual funding.

Conclusion:

While Ontario, and more specifically the Greater Toronto Area, has a relatively sophisticated and robust out-of-classroom learning system to support student experiences related to natural science, conservation and the environment, the lack of a cohesive framework for the continued advancement of this segment of the learning system creates a long-term risk. As per the approved Terms of Reference and Workplan for the OETF, the above Vision Statement and Strategic Recommendations provide a framework for the advancement of the overall shared objectives of meeting the current and future out-of-classroom learning needs related to natural-science, conservation and the environment for students to the year 2040.

The work of the OETF as outlined in the terms of reference is now complete, however, ongoing advocacy for the above framework will be required in order to fully realize the above Vision Statement and Strategic Recommendations.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan
This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 – Rethink greenspace to maximize its value

Strategy 5 - Foster sustainable citizenship

Strategy 7 – Build partnerships and new business models

Strategy 12 – Facilitate a region-wide approach to sustainability

FINANCIAL DETAILS

A financial assessment of the costs associated with the administration of the Natural Science and Education Committee will be completed and will be included in the final report to TRCA's Board of Directors.

DETAILS OF WORK TO BE DONE

Final recommendations will be provided to area and participating school boards for consideration of adoption by Boards of Trustees with a target date of adoption by Q3 2021.

TRCA staff will work with OETF members to make arrangements for presentations on the final Vision Statement and Strategic Recommendations.

Final recommendations will be brought forward to TRCA's Board of Directors for consideration, endorsement and approval at the next appropriate board meeting.

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Date: January 12, 2021

Attachments: 1

Attachment 1: Toronto and Region Conservation Authority Outdoor Education Task Force: Final Statement

January 25, 2021

Toronto and Region Conservation Authority Outdoor Education Task Force

Final Statement

In 2019, Toronto and Region Conservation Authority (TRCA) convened the Outdoor Education Task Force (Task Force) to develop a framework for the long-term provision of out-of-classroom learning experiences related to natural science, conservation and the environment that meets the needs of the student population to the year 2040.

As part of a series of working group activities, the Task Force was asked to imagine a future where outdoor education is accessible to all and hold an important role in students' learning experience; a future where outdoor education is held to the highest standard of what it means to learn outside of the classroom and brings to life natural science, conservation and the environment. The Task Force proposed the enclosed Vision Statement to guide the work of TRCA, school boards and other partners in bringing a renewed framework and Task Force recommended actions to life.

It is also worth noting that we are having these conversations in a transformative time as Covid-19 has changed our daily habits and disrupted how we learn, work and live. The global pandemic brought into sharp focus the importance of access to the outdoors for our individual and collective well-being. In our context of K - 12 education, it has also highlighted some misconceptions about what outdoor education¹ is.

¹ The terms environmental education (EE), outdoor education (OE), and outdoor experiential education (OEE) have often been used interchangeably and have lost their distinction in common language usage. While we are using the term outdoor education throughout this framework, it is our intention to shift the language *to out-of-classroom learning* to better represent the full inclusiveness of the learning experiences we are promoting: natural science, conservation, and environmental.



We envision a future where...

The students of Ontario have consistent access to quality outdoor education. Educators have the confidence and self-efficacy to make environmental stewardship a pillar of their classroom pedagogy.

Trustees, in partnership with parents and guardians, and in cooperation with TRCA, advocate for system change in how funds are allocated for outdoor education. Advocacy is targeted towards an ecosystem of funders, like the Ontario Ministry of Education, School Boards, and organizations like the OPSBA, OSTA-AECO, OCSTA, AFOCSC, and industry, with the goal of consistent funding to support long-term planning and a breadth of actions that will ensure flexibility for classrooms and whole school boards in their delivery of outdoor education.

Community comes together to create a system of support ensuring impactful out-of-classroom learning related to natural science, conservation and the environment.

Environmental stewardship is rooted in a global, interconnected understanding that is introspective: building an appreciation for Indigenous knowledge and communities, and understanding the role of colonialism on our understanding, behaviours and relationship with the land.

Generations of environmental stewards are fostered, sparked, nourished and sustained with outdoor education experiences; contributing to a citizenry with a life-long appreciation for nature and land, and the agencies required to take actions that ensure a viable future for ourselves and the environment.

Where TRCA, working with our partners, is the...

Catalyst that brings stakeholders together to foster environmental stewardship that is rooted in equity and anti-oppression and makes access to out-of-classroom learning related to natural science, conservation and the environment a reality for all students living in TRCA and school board communities.

Convener of important conversations and facilitator of taking actions that will link school boards to school boards, organizations with school boards and school boards to organizations and to TRCA - based on valuable input from council members, community liaisons and educators. This work shifts the culture of the education community - with students, parents, guardians, classroom educators, administrators and central staff - to one that champions the importance of outdoor education.



With our school board partners, TRCA can bring this vision to life by...

Stepping into a leadership role

As TRCA we have a leadership role to play. A history of doing good, impactful work has made us a leader in conservation and outdoor education grounded in science. We will leverage our power to influence how the outdoor education community fosters environmental stewardship rooted in equity, anti-oppression and cultural appreciation while striving for continuous improvement and stakeholder engagement.

Leading with student voice

If outdoor education is going to be equitable, anti-oppressive and reflective of student identities, students must lead the way in imagining, influencing and informing possibilities. As an organization with power, we will centre the identities and lived experiences with students to be accountable in our work.

Convening and building the collaboration ecosystem

Shifting culture requires stakeholders to collaborate. TRCA is the connector for groups, creating the wrap-around support for educators, students and communities to engage in outdoor education. It is this collective that will build momentum to advocate for system change in funding for outdoor education and creating the budget flexibility needed to allow individual schools and school boards to engage in outdoor education. As collaboration grows in the system, new partnerships will emerge, for example the school boards sharing land for out of classroom learning experiences.

Setting the standard for outdoor education programming, together.

As a collective - with students, school boards, educators and organizations-, we will identify the guiding principles that outdoor education should be designed with. It is these principles that will set the standard for experiences that are safe, rooted in equity and anti-oppression; accessible to all and affirming to student identities, regardless of socioeconomic and geographic proximity. Collectively we will set standards and guidelines that recognize the risks associated with outdoor education to create outdoor experiences that are accessible, enjoyable, and safe. Equity guiding principles will be jointly created with this collective to use in designing outdoor education experiences and promoting environmental stewardship. This is how we build capacity in community to look for quality experiences in outdoor education.



Co-creating the entry points

TRCA supports students, educators, school boards, senior staff and community organizations in bringing outdoor education experiences to life. There is no single right way to start developing as an environmental steward. The TRCA and organizations will leverage their unique assets including land, educators, technology and community, to create experiences. TRCA will collaborate with organizations and educators to co-design outdoor education experiences that are rooted in cultural knowledge and appreciation and embedded within inquiry-based learning that amplifies the learning and experiences.



Items for the Information of the Natural Science and Education Committee

RES.#NSEC8/22 - SUMMARY REPORT ON OUTDOOR EDUCATION SYSTEM AND CENTRES

Moved by: Thomas Thomas Seconded by: Manna Wong

WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a Multi-stakeholder Natural Science and Education Committee, as a sub-committee of TRCA's Board of Directors;

AND WHEREAS the Natural Science and Education Committee has been convened to study and make recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area;

THEREFORE, LET IT BE RESOLVED THAT the staff presentation on the outdoor education system history and outdoor education centres in the GTA be received;

AND FURTHER THAT the following information report on the history and current state of conservation authority and school board outdoor education centres be received.

CARRIED

BACKGROUND

Commonly referred to as *outdoor education*, the learning programs of Toronto and Region Conservation Authority and local school boards that occur in the out-of-doors are rooted in the philosophy that education about conservation, the environment and natural science is strengthened and enhanced through out-of-classroom learning. In many cases "outdoor education centres" are referred to as natural science schools, environmental education centres, conservation field centres or nature centres, however, they all share one trait in common: they provide curriculum-linked natural-science based out-of-classroom learning opportunities.

History of Toronto and Region Conservation Authority Out-Of-Class Learning Programs

Conservation education has been viewed as an integral part of the work of conservation authorities since the inception of the conservation authority movement in Ontario. At the London Conference in 1944, delegates from across Ontario, which included representatives and officials from municipalities, federal and provincial governments, the education system, the agricultural sector, and representatives of naturalist and conservation organizations, convened to study and propose a response to a range of pressing issues related to natural resource management.

In addition to resolutions related to land acquisition, flood control and conservation projects, delegates at the 1944 London Conference identified the need to improve the engagement of students throughout the educational system in Ontario, specifically:

R.1 (g) Fostering the direction of adequate attention to all phases of the conservation of natural resources in all the educational work of the province of Ontario.

In 1953, in partnership with York Memorial Collegiate Institute, the then Humber Valley Conservation Authority delivered the first "camp school", a three-day excursion to Camp Kneale in the community of Bolton to learn about weather patterns, wildlife, natural systems, agriculture and soils conservation, and the local environment. Following the success of the camp school which had continued annually under the stewardship of York Memorial Collegiate Institute and Humber Valley Conservation Authority staff, planning by the newly formed Metropolitan Toronto and Region Conservation Authority (MTRCA) for a permanent education school began in 1958, with Albion Hills Conservation Area being selected as the preferred site. At the groundbreaking ceremony for the Albion Hills Conservation School in 1962, The Honourable William G. Davis, at the time the Minister of Education, noted that "conservation is more than a subject, be it taught in or out-of-doors". It is this philosophy that has guided the work of conservation authorities in delivering out-of-classroom learning in the fifty-five years since.

Throughout TRCA's history, conservation education programs at TRCA have been developed in collaboration with a wide range of partners, including school boards, municipalities, federal and provincial governments, non-government organizations (NGOs), social service agencies and others. These programs are designed to not only develop environmental knowledge but provide opportunities for students to translate this learning into conservation action at home and in the school, community and workplace. These learning programs are responsive to an evolving curriculum within the formal education system, as well as shifts in industry, immigration and demographic trends and are grounded in the Conservation Authorities Act, which enables conservation authorities to provide for "the delivery of watershed-based programs and services that further the conservation, restoration, development and management of natural resources". Today, TRCA's education activities reach over 150,000 learners annually and are delivered at TRCA's education sites, conservation areas and in the school.

Since the inaugural camp school in 1953, TRCA has continued to develop new and innovative education programs and facilities across the region's watersheds through both formal and informal partnerships with area school boards. These include formal land leases for the operation of school board outdoor education centres, the joint construction and operation of shared education facilities, or service delivery partnerships for the provision of natural science out-of-classroom learning.

History of School Board Out-Of-Class Learning Programs

At the same time the then MTRCA was delivering camp schools, and subsequently planning for a new conservation school at Albion Hills, the Schools Administration Act was being updated to reflect an emerging interest in educating students in and about natural systems and the environment. In 1954, the Ontario Department of Education included in curriculum documents that direct exposure to the local natural environment be given to students through outdoor learning to facilitate lessons related to conservation and natural science. Further amendments in 1960 to the Schools Administration Act enabled school boards to establish school facilities for the purpose of natural science or conservation learning, or to fund opportunities for students to participate in similar programs at a natural science school. Changes again to the School Administration Act in 1965 further enabled school boards with enrollment of 10,000 students to purchase land (not to exceed 200 acres) in any municipality and operate a natural science school.

Throughout the 1960s, the Ontario Department of Education, through enabling regulations, continued to encourage school boards to develop outdoor education centres with the belief that natural science-based out-of-classroom learning and conservation education was an effective response to the pressing environmental concerns of the era. This movement in support of outdoor learning was reinforced through recommendations contained within the 1968 Department of Education report *Living and Learning: The Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario*, known as the Hall-Dennis Report, which encouraged school boards, conservation authorities and others to cooperate in providing "natural science schools for outdoor education and the development of conservation principles". Further facilitating the growth of the outdoor education movement in Ontario was the relative economic prosperity of the period. School boards were experiencing significant growth through this period and had available resources for the establishment of outdoor education centres.

It was with these changes to the School Administration Act and pedagogical approaches to educating students that local school boards began to develop natural science schools both locally and on properties outside of the Greater Toronto Area. The first school-board operated centre to open was the Island Natural Science School on the Toronto Islands in 1960, which provided, and continues to provide, multi-day learning experiences for Toronto students. In 1967, the Toronto Board of Education purchased property north of Orangeville that would become the Boyne River Natural Science School. This was followed by a number of day-use education centres, including the Forest Valley Outdoor Education Centre (Toronto Board of Education, 1967) in North York, the Burrlington Outdoor Resource Centre (York Board of Education, 1968) in Vaughan and the Jack Smythe Field Centre (Peel Board of Education, 1969) in Terra Cotta.

Central to the development of school board-operated centres in this era was the perspective that students developed a stronger understanding and appreciation of nature and natural environments through the direct exposure to, and experience within, diverse ecosystems, and thus could better contribute to the goals of conservation. From a curricular perspective, the learning programs delivered to students at outdoor education centres focused on providing access to the natural environment, while also developing skills related to natural resource management. There was also a further recognition at the time that students from a then urbanizing city-region faced an increasing disconnect from their natural environment and outdoor education centres sought to create opportunities for urban students to experience nature.

While school board outdoor education programs continued to develop through the 1970s and into the early 1980s, Provincial budget constraints in the late 1980s and 1990s slowed development of new natural science schools operated by school boards. By the early 2000s, further constraint led to the closure of one TRCA overnight centre (Boyd Field Centre), operated under a partnership agreement with local school boards, in 2001, followed by three Toronto District School Board overnight centres (Pine River Outdoor Education Centre, Noisy River Outdoor Education Centre and Boyne River Natural Science School) in 2003. However, during this time the York Region District School Board established the Sibbald Point Outdoor Education Centre within Sibbald Point Provincial Park in Georgina in 2004 and the Swan Lake Outdoor Education Centre in Richmond Hill in 2016 in partnership with TRCA. Inventory of Conservation Authority and School Board-Operated Outdoor Education Centres

The following is an inventory education centres operated by TRCA and local school boards. Centres in *italics* are either located on, or adjacent to, TRCA-owned greenspace.

	Operated			
Outdoor Education Centre	Ву	Location	Туре	Opened
School Board Operated Centres	200			1000
Duffins Creek Environmental Education Centre	DDSB	Claremont	Day	1989
Nonquon Environmental Education Centre	DDSB	Greenbank	Day	1977
Durham Forest Environmental Education Centre	DDSB	Goodwood	Overnight	1978
Old Brittania School House	PDSB	Mississauga	Day (Seasonal)	1982
Brittania Farm Field Centre	PDSB	Mississauga	Day (Seasonal)	1988
GW Finlayson Field Centre	PDSB	Orangeville	Day	1975
Jack Smythe Field Centre	PDSB	Terra Cotta	Day	1969
Forest Valley Outdoor Education Centre	TDSB	Toronto	Day	1967
Hillside Outdoor Education School	TDSB	Toronto	Day	1975
Toronto Urban Studies Centre	TDSB	Toronto	Day	1978
Warren Park Outdoor Education Centre	TDSB	Toronto	Day	1972
Etobicoke Outdoor Education Centre	TDSB	Caledon	Overnight	1982
Island Natural Science Centre	TDSB	Toronto	Overnight	1960
Mono Cliffs Outdoor Education Centre	TDSB	Orangeville	Overnight	1986
Scarborough Outdoor Education School	TDSB	Kearny	Overnight	1978
Sheldon Centre for Outdoor Education	TDSB	Alliston	Overnight	1982
Swan Lake Outdoor Education Centre	YRDSB	Richmond Hill	Day	2016
Milne Outdoor Education Centre	YRDSB	Markham	Day	1990
Sibbald Point Outdoor Education Centre	YRDSB	Sutton	Day	2004
Burrlington Outdoor Education Centre	YRDSB	Kleinburg	Day	1968
Vivian Outdoor Education Centre	YRDSB	Ballantrae	Day	1972
				•
Conservation Authority Operated Centres				
Kortright Centre for Conservation	TRCA	Vaughan	Day	1979
Claremont Nature Centre	TRCA	Claremont	Overnight	1970
Albion Hills Field Centre	TRCA	Caledon	Overnight	1963
Lake St. George Field Centre	TRCA	Richmond Hill	Day	1979
Claireville Nature Centre (formerly Etobicoke			,	
Field Studies Centre)	TRCA	Brampton	Day	2021
Black Creek Pioneer Village	TRCA	Toronto	Day	1960
Tommy Thompson Park Education Programs	TRCA	Toronto	Day (Seasonal)	2004
		Whitchurch-	,	
Bruce's Mill Maple Syrup Programs	TRCA	Stouffville	Day (Seasonal)	1968

RATIONALE

Under S.197 of the Education Act (RSO 1990), conservation authorities and school boards are enabled to enter into an agreement for the use of lands, buildings and personnel for the

purposes of providing natural science, conservation or other out-of-classroom programs. The following sections of the Education Act outline the various mechanisms available to school boards for the provision of out-of-classroom programs.

Idem

(9) One or more boards may enter into an agreement with a conservation or other appropriate authority to provide for the construction, furnishing and equipping by the authority on lands owned by the authority of facilities for the purposes of conducting a natural science, conservation or other out-of-classroom program as directed by the board or one or more of the boards and, where under the agreement a board is required to pay all or part of the cost of the facilities, the construction of the facilities shall be first approved by the Minister, and the amount paid therefor by the board shall be deemed to be an expenditure made by the board for a permanent improvement. R.S.O. 1990, c. E.2, s. 197 (9).

Board and lodging for courses in conservation

- (10) A board may provide or pay for board and lodging for a pupil for a period not exceeding two weeks in any year while the pupil participates, with the consent of his or her parent or guardian and with the permission of the board, in a natural science, conservation or other out-of-classroom program. R.S.O. 1990, c. E.2, s. 197 (10).
- (5) Two or more boards may enter into an agreement for a period specified therein for the shared use of a school site in Ontario for conducting natural science programs and other out-of-classroom programs but, where under such agreement one of the boards may acquire or is to acquire by purchase or lease a school site for such purpose or is to erect, add to or alter a building on or make other improvements to such site, the agreement is not effective until it is approved by the Minister, and a school site situate outside the jurisdiction of the boards that are parties to the agreement shall not be acquired without the prior approval of the Minister. R.S.O. 1990, c. E.2, s. 197 (5).

Agreements with conservation authorities, etc.

(7) A board may enter into an agreement with a conservation or other appropriate authority under which the board may, with the approval of the Minister, construct and maintain on lands owned by the authority the necessary facilities for the purpose of conducting a natural science program or other out-of-classroom program. R.S.O. 1990, c. E.2, s. 197 (7).

ldem

(8) A board that conducts a natural science, conservation or other out-of-classroom program may enter into an agreement with a conservation or other appropriate authority for the use of the facilities and personnel of such authority for the purpose of conducting such a program as directed by the board. R.S.O. 1990, c. E.2, s. 197 (8).

It is through the above enabling legislation that much of the conservation authority and school board operated outdoor education system has developed to respond to student needs related to

learning in the out-of-doors. The above clauses specific to conservation authorities and school boards recognize of the value of partnerships as a model for delivering outdoor education, and provide mechanisms for efficient and effective future collaborations that maximize the potential of public assets while enhancing access for students to natural science, conservation and environmental learning opportunities in the out-of-doors.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 - Rethink greenspace to maximize its value

Strategy 5 - Foster sustainable citizenship

Strategy 6 – Tell the story of the Toronto region

Strategy 7 – Build partnerships and new business models

FINANCIAL DETAILS

There are no financial implications related to this report.

DETAILS OF WORK TO BE DONE

There is no further work to be completed as a result of this report.

Report prepared by: Darryl Gray, (416) 791-0327

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Date: January 20, 2022

ADJOURNMENT

On motion by Connie Tang, the meeting 2022.	was adjourned at 7:28pm., on Monday, February 7,
Stan Cameron Chair	Jennifer Wigston Vice Chair
/dq	

Items for the Action of the Natural Science and Education Committee

TO: Chair and Members of the Natural Science and Education Committee

Monday, April 04, 2022 Meeting

FROM: Darryl Gray, Director, Education and Training

RE: NATURAL SCIENCE AND EDUCATION STAFF WORKING TABLE

Terms of Reference for Establishment of Natural Science and Education Staff

Working Table

KEY ISSUE

Approval of Terms of Reference for establishment of a multi-stakeholder Natural Science and Education Staff Working Table to inform and support the work of the Natural Science and Education Committee.

RECOMMENDATION

WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a Multi-stakeholder Natural Science and Education Committee, as a sub-committee of TRCA's Board of Directors;

AND WHEREAS the Natural Science and Education Committee has been convened to study and make recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area;

AND WHEREAS the establishment of a Staff Working Table was identified in the 2022 workplan of the Natural Science and Education Committee;

THEREFORE LET IT BE RESOLVED that the attached Terms of Reference for the establishment of a Natural Science and Education Staff Working Table be approved.

BACKGROUND

The Natural Science and Education Committee (NSEC) provides a multi-stakeholder governance framework to advance shared objectives pertaining to out-of-classroom learning related to natural-science, conservation and the environment in the Greater Toronto Area. By bringing together key stakeholders, including TRCA, area school boards, the Ministry of Education, indigenous communities and youth, TRCA and school board partners will be better able to leverage the value of the publicly built and operated system that supports out-of-classroom learning related to natural science, conservation and the environment more effectively, while also ensuring the current and future learning needs are met.

As a sub-committee of TRCA's Board of Directors, the Natural Science and Education Committee has a mandate to:

Study and make recommendations to the Board of Directors of TRCA regarding recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-

classroom learning related to natural science, conservation and the environment in the Greater Toronto Area region.

The objectives of the Natural Science and Education Committee are to advise TRCA and partner agencies on the effective implementation and advancement of the recommendations of the Outdoor Education Task Force, specifically the following:

- (a) Establish Consistent Access and Curricular Standards Across TRCA and School Boards.
- (b) Establish a Unified Performance Measurement System.
- (c) Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System.
- (d) Develop a Long-Term Equitable Access Financial Plan.

Members of both the Outdoor Education Task Force and Natural Science and Education Committee have expressed a desire and need to engage school board and other organization or agency staff in the work the Committee and as such the development of a Staff Working Table was included in the 2022 work plan for the Committee. Based on this, TRCA staff have prepared a Terms of Reference for a Staff Working Table for Committee consideration.

RATIONALE

Recognizing that municipal and school board elections are scheduled for Monday, October 24, 2022, Committee work related to the current term of the Natural Science and Education Committee will conclude following the June 6, 2022 meeting. As such, the Natural Science and Education Staff Working Table will focus on actioning any items from the Committee, continuing to engage with key stakeholders as it relates to the recommendations of the Outdoor Education Task Force, as well as preparing for next term of the Natural Science and Education Committee commencing in February 2023.

The Natural Science and Education Staff Working Table will meet two (2) times in 2022 and will meet a minimum of three times a year following that, or as needed based on Natural Science and Education Committee recommendations or direction.

Members will be appointed by their home organization at the request of the Chair of the Natural Science and Education Committee Chair until commencement of the next term of the Natural Science and Education Committee. Upon convening of the 2023 term of the Natural Science and Education Committee, members of the Staff Working Table will be appointed for a four-year term in alignment with the Natural Science and Education Committee.

As an advisory committee of the Natural Science and Education Committee, the Natural Science and Education Staff Working Table will report to the Committee with minutes and action items circulated to participating member organizations as required.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 – Rethink greenspace to maximize its value

Strategy 5 - Foster sustainable citizenship

Strategy 7 - Build partnerships and new business models

Strategy 8 - Gather and share the best sustainability knowledge

FINANCIAL DETAILS

Costs related to the TRCA administration and management of the Staff Working Table are included in TRCA operating account 365-01.

Any direct costs associated with staff participation from school boards, organizations or agencies, including salary, mileage, consumables or other as deemed necessary by the appointing organization, will be covered by appointing organizations.

DETAILS OF WORK TO BE DONE

Following approval of the Terms of Reference of the Staff Working Table, TRCA staff will prepare letters of invitation to participating organizations. The first meeting of the Staff Working Table is planned for September 2022, however, informal orientation meetings may take place prior to the official commencement of the Working Table.

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Date: March 18, 2022

Attachments: 1

Attachment 1: Terms of Reference: Natural Science and Education Staff Working Table

NATURAL SCIENCE AND EDUCATION COMMITTEE STAFF WORKING TABLE

TERMS OF REFERENCE 2022

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1. PURPOSE

- 1.01. To establish a staff working table to support, advise and coordinate the efficient implementation of work, direction and recommendations from Toronto and Region Conservation Authority's Natural Science and Education Committee (NSEC) as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation, and environment in the Toronto region.
- 1.02. To meet the current and future needs of the student population in the Greater Toronto Area region as it pertains to out-of-classroom learning related to natural science, conservation, and the environment, and ensure equity of access to programs and services.

2. OBJECTIVES

- 2.01. Collaboratively advance the implementation of the recommendations of the Outdoor Education Task Force (2021) and the activities and recommendations of the NSEC.
- 2.02. Provide input, advice and expertise to the NSEC on matters as necessary and appropriate.
- 2.03. Support efficient planning and use of expertise and capacity within the out-ofclassroom learning system related to natural science, conservation, and the environment.

3. AUTHORITY

- 3.01. The staff working table will study, report and make recommendations to the NSEC on improvements and future needs for the provision, planning and access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area region.
- 3.02. The work of the staff working table of the NSEC is to meet needs located wholly or partially within the school boards of TRCA's participating municipalities.

4. MEMBERSHIP AND ELECTIONS

- 4.01. Membership to consist of:
 - (a) Established Environmental Education or Science-Based Organizations or Agencies that provide curriculum-linked experiences for students (up to 5);
 - (b) TRCA staff (up to 4);
 - (c) School Boards within TRCA's participating municipalities (up to 8);
 - (d) School Board Indigenous Consultants (up to 8).
- 4.02. Committee members will be appointed for a four-year team aligned with the NSEC Term, or until their successors are appointed.

4.03. The Chair and Vice-Chair for the NSEC Staff working table will be elected from amongst its Members for the term of the working table. The election procedures and procedural matters used for this election and in the administration of the subcommittee will be that outlined in the Board of Directors Administration By-law.

5. ROLES AND RESPONSIBILITIES

- 5.01. The **Chair** is responsible for:
 - (a) Presiding over staff working table meetings, setting the agenda and generally ensuring the effectiveness of meetings;
 - (b) Calling special meetings, as required;
 - (c) In the absence of the Chair, the Vice-Chair will perform the above functions;
 - (d) In the absence of the Chair and Vice-Chair, Members shall appoint an Acting Chair who, for the purposes of that meeting has all the powers and shall perform all the duties of the Chair.
- 5.02. **Staff Working Table Members** are responsible for:
 - (a) Working collaboratively to study and develop recommendations related to the mandate:
 - (b) Representing their school board or organization;
 - (c) Attending Committee meetings as required;
 - (d) Acting as a resource to the NSEC by providing advice on matters of the committee:
 - (e) Maximizing the collective impact of the Committee through resource and data sharing, measuring, and reporting on the NSEC priorities;
 - (f) Reporting to the NSEC on a regular basis.
- 5.03. **TRCA's Director, Education and Training** is responsible for providing general support to the activities and actions of the staff working table.
- 5.04. **TRCA's Administrative Coordinator, Education and Training** is responsible for acting in a Committee Clerk capacity, arranging meeting logistics, preparing the agenda, maintaining meeting minutes, tracking and delegating action items.

6. GOVERNANCE

- 6.01. The staff working table is an advisory body to the NSEC and as such does not have decision-making power but shall make recommendations to the Committee.
- 6.02. The staff working table may establish smaller specialized working groups as needed.
- 6.03. The staff working table shall meet at minimum three times per year or more frequently as required. Members are required to attend all meetings of the staff working table.

7. REPORTING

7.01. The staff working table is an advisory group and will make recommendations to the NSEC.

7.02. Each member shall report back to their appointing agency as required.

8. **DEFINITIONS**

None.

Items for the Information of the Natural Science and Education Committee

TO: Chair and Members of the Natural Science and Education Committee

Monday, April 04, 2022 Meeting

FROM: Darryl Gray, Director, Education and Training

RE: POLICY SCAN AND ACCESS STANDARDS

Report on Policies and Standards for Access to Out-of-Classroom Learning

KEY ISSUE

Report to the Natural Science and Education Committee on current school board policies related to nature-based out-of-classroom learning and a proposed minimum standards framework for consideration.

RECOMMENDATION

WHEREAS at Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including Recommendation #1: Establishment of a Multi-stakeholder Natural Science and Education Committee, as a sub-committee of TRCA's Board of Directors;

AND WHEREAS the Natural Science and Education Committee has been convened to study and make recommendations to TRCA and government and agency partners on improvements and future needs as it pertains to the provision, planning or access for students to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area;

THEREFORE LET IT BE RESOLVED THAT the following report on existing school board policies related to out-of-classroom learning specific to natural science, conservation and the environment;

AND draft recommended minimum standards of student access contained in this report be considered by the Natural Science and Education Committee at its Leadership Session and in further consultations with stakeholders;

AND FURTHER THAT staff report back to the Natural Science and Education Committee at its June 6, 2022 meeting on a final draft set of minimum standards of student access for consideration as a recommendation to the TRCA Board, Province, and partner School Boards.

BACKGROUND

Since 1953, Toronto and Region Conservation Authority (TRCA) and area school boards have collaborated through formal partnerships on the delivery of out-of-classroom learning related to natural science, conservation, and the environment for students of the Greater Toronto Area. Over the last sixty (60) years, a robust system of learning centres has developed to support nature-based student learning in the out-of-doors, which currently consists of thirty (30) dedicated or purpose-built facilities operated by TRCA and area school boards. Of these thirty centres, eight are operated by TRCA and twenty-two (22) are operated by local school boards, of which sixteen (16) currently have some form of agreement with either a local conservation authority, regional municipality or the Government of Ontario for provision or access either to or

of greenspace, or learning facilities, to support out-of-classroom learning for students.

Outdoor Education Centre	Operated By	Location	Туре	Opened
School Board Operated Centre				
Duffins Creek Environmental Education				
Centre	DDSB	Claremont	Day	1989
Nonquon Environmental Education Centre	DDSB	Greenbank	Day	1977
Durham Forest Environmental Education				
Centre	DDSB	Goodwood	Overnight	1978
Old Brittania School House	PDSB	Mississauga	Day (Seasonal)	1982
Brittania Farm Field Centre	PDSB	Mississauga	Day (Seasonal)	1988
GW Finlayson Field Centre	PDSB	Orangeville	Day	1975
Jack Smythe Field Centre	PDSB	Terra Cotta	Day	1969
Silver Creek Outdoor Education Centre	DPCDSB	Belfountain	Day	1981
Forest Valley Outdoor Education Centre	TDSB	Toronto	Day	1967
Hillside Outdoor Education School	TDSB	Toronto	Day	1975
Toronto Urban Studies Centre	TDSB	Toronto	Day	1978
Warren Park Outdoor Education Centre	TDSB	Toronto	Day	1972
Etobicoke Outdoor Education Centre	TDSB	Caledon	Overnight	1982
Island Natural Science Centre	TDSB	Toronto	Overnight	1960
Mono Cliffs Outdoor Education Centre	TDSB	Orangeville	Overnight	1986
Scarborough Outdoor Education School	TDSB	Kearny	Overnight	1978
Sheldon Centre for Outdoor Education	TDSB	Alliston	Overnight	1982
Swan Lake Outdoor Education Centre	YRDSB	Richmond Hill	Day	2016
Milne Outdoor Education Centre	YRDSB	Markham	Day	1990
Sibbald Point Outdoor Education Centre	YRDSB	Sutton	Day	2004
Burrlington Outdoor Education Centre	YRDSB	Kleinburg	Day	1968
Vivian Outdoor Education Centre	YRDSB	Ballantrae	Day	1972
Conservation Authority Operated Centre				
Kortright Centre for Conservation	TRCA	Vaughan	Day	1979
Tommy Thompson Park Education Programs	TRCA	Toronto	Day (Seasonal)	2004
Tommy mompson Furk Education Frograms	TRCA	Whitchurch-	Day (Seasonal)	2004
Bruce's Mill Maple Syrup Programs	TRCA	Stouffville	Day (Seaonsal)	1968
Claremont Nature Centre	TRCA	Claremont	Overnight	1970
Albion Hills Field Centre/Conservation Area	TRCA	Caledon	Overnight/Day	1963
Lake St. George Field Centre	TRCA	Richmond Hill	Overnight	1979
Black Creek Pioneer Village	TRCA	Toronto	Day	1960
Claireville Nature School	TRCA	Brampton	Day	2021

^{*}School board centres denoted in *italics* located on or adjacent to TRCA greenspace

Outdoor Education Task Force

Item 7.2

At Meeting #6/18 on July 20, 2018, TRCA Board of Directors approved the establishment of an Outdoor Education Task Force (Task Force) with an eighteen (18) month mandate to study, develop, and recommend strategic future directions related to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area (GTA), specifically including Peel, York and Durham Regions and the City of Toronto.

Comprised of School Board Trustees and TRCA Board Members, the Task Force recognized in its deliberations an inconsistency across school boards in the ability and capacity to deliver, or access, out-of-classroom learning related to natural science, conservation and the environment for students that meet curricular expectations. Through the work of the Task Force it was also identified that principles of inclusion and equity of access were integral to the strengthening of the out-of-classroom learning system and programs. To this end, the Task Force recommended that standards be established that provide for a minimum base for out-of-classroom learning experiences related to natural science, conservation and the environment for students, and that these essential experiences be curriculum-linked via a scope and sequence and reflect the Task Force's expectations related to equitable inclusion and student-centred perspectives.

The system of out-of-classroom learning centres and facilities referenced above, specifically the thirty education centres owned and/or operated by TRCA and area school boards, represents a significant suite of publicly-owned assets that meet the needs of students from area school boards on a daily basis in providing curriculum-linked experiential learning related to natural science, conservation and the environment. While this system is enabled through Section 197 of the Education Act, which makes provisions for a conservation authority and school board to establish a formal agreement for the provision of greenspace, facilities or instructional services related to out-of-classroom learning, as recognized by the Task Force, there is no specific standards for student access to out-of-classroom learning.

At Meeting #2/21 held on February 26, 2021, TRCA's Board of Directors endorsed the Final Report and Recommendations of the Outdoor Education Task Force, including,

Recommendation #2: Establish Consistent Access and Curricular Standards Across TRCA and School Boards

The recommendation related to the establishment of consistent standards focused on ensuring not only equitable access to out-of-classroom learning related to natural science, conservation and the environment for students from all school boards. It further sought to root these standards in a consistent and common curricular framework as well as grounding the learning in real-world applied conservation and environmental science, of which TRCA is the leading local agency. Additionally, the Task Force acknowledged the importance of harmonizing policy, funding, curriculum and risk management practices to both ensure the overall efficacy of learning for students accessing out-of-classroom learning related to natural science, conservation and the environment, as well as facilitating the ease of access for these experiences.

School Board Policy Scan

To begin to address Recommendation #2 of the Task Force and inform the work of the Natural Science and Education Committee, TRCA staff have completed a scan of school board policies and enabling instruments related to out-of-classroom learning. Through this scan it was identified that all area school boards have Excursion Policies and all area school boards have some form of subsidy available for out-of-classroom learning. Furthermore, as outlined below in

the following summary five of the eight school boards have existing agreements with either TRCA or other government agencies or organizations.

School Board	Excursion	Target	Subsidy	Owned	Lease or	Lease or
	Policy Date	Grades	Available	Centres	Agreement	Agreement
					with TRCA	with Other
DDSB	Yes (internal	Yes	Yes	Yes	Yes	Yes
	access only)					
DCDSB	2019		Yes			
DPCDSB	2019		Yes			Yes
PDSB	2018		Yes	Yes		
TCDSB	2019	Yes	Yes		Yes	Yes
TDSB	2019	Yes	Yes	Yes	Yes	Yes
YCDSB	2020		Yes			
YRDSB	2013	Yes	Yes	Yes	Yes	Yes

Further to the above, staff completed a scan of area school boards objectives related to out-ofclassroom learning to better understand target grades for these curriculum-linked experiences and inform the establishment of minimum standards for access. While all area boards have enabling excursion policies, as outlined below, there is no consistent approach to determining grades that receive out-of-classroom learning experiences related to natural science, conservation and the environment.

School Board	JK/SK	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7	Gr. 8	Secondary
DDSB				Current focus is on grades 2-12.						
			Prev	iously g	rades 3	, 6 (ove	rnight)	and sec	ondary w	ere targeted.
DCDSB										
DPCDSB										
PDSB										
TCDSB		Every other year								
TDSB	Two (2) day visits between grades K-8, and one (1) overnight experience									
	between grades 5-8.									
YCDSB										-
YRDSB			Χ		Χ			X		

As per the recommendations of the Task Force, a key activity of the Natural Science and Education Committee is to build on existing supportive school board policies and provide recommendations to TRCA's Board of Directors and area school boards on consistent standards for student access to out-of-classroom learning related to natural science, conservation and the environment in the Greater Toronto Area. As identified above, only three of the eight area school boards have formal expectations for access and only YRDSB specifically targets identified grades for access to excursions. Boards that do not specifically target grades generally provide opportunities for teachers and classes in all or various grades to access learning facilities, however, while opportunities for student learning experiences exist and are encouraged across all boards, including subsidies in various forms, there is no consistent rationale underpinning the system at large, which was a key gap identified by the Task Force and again outlined here.

RATIONALE

Proposed Minimum Standards Framework

Out-of-classroom learning related to natural science, conservation and the environment is foundational to broader learning objectives in the Elementary Science and Technology Curriculum as well as the Grade 9 and 10 Science Curriculum. As with other curricular areas, to be effective, natural science, conservation and environmental learning must be sequential, integrated and provide for repeated exposure. Furthermore, out-of-classroom learning experiences provide multiple benefits to student development by contextualizing curriculum in ways that cannot be done in the classroom – a highly trained teaching professional in a natural system, supported by real-world science practitioners, can accelerate student understanding of complex concepts and interactions through experiential learning.

Within their final report, the Task Force acknowledged the importance of harmonizing policies in support of student access to out-of-classroom learning related to natural science, conservation, and the environment. Consistent curricular and access standards across school boards will ensure students have equitable access and create a framework for assessing and developing the broader out-of-classroom learning system that supports student success in this area. In the absence of a coordinated framework or minimum standards for access to out-of-classroom learning related to natural science, conservation and the environment, continued inequity, or inconsistency amongst and between jurisdictions will persist. However, given that all school boards have excursion policies in place, as well as provide some form of subsidy, there is a strong foundation of shared principles and practices upon which to build.

To this end, the following is a recommended framework for minimum standards of access for students in area school boards:

Elementary Science and Technology Curriculum						
Grade	Туре	Understanding Life Systems				
			Space Systems			
Grade 2	Day	Growth and Changes in	Air and Water in the			
Animals Environment						
Grade 4	Day	Habitats and Communities				
Grade 7	Overnight	Interactions in the Environment				
Secondary Science Curriculum						
Grade	Type	Biology	Earth and Space Science			
Grade 9	Day	Sustainable Ecosystems				

The above framework for minimum standards of access for students will support the following:

- 1. Aligns out-of-classroom learning experiences related to natural science, conservation and the environment with specific curricular expectations;
- Cross-supports curriculum and learning in Grades 3, 5, 6, 8 and 10, creating opportunities for leveraged learning both in the classroom and in the schoolyard or community:
- 3. Creates a consistent and clear system that ensures equitable access for all students in the GTA while supporting improved system planning and resourcing GTA-wide.

It should be noted the establishment of minimum standards does not preclude school boards for scaling activities above and beyond the proposed framework and locally developed opportunities to enhance, augment and support student learning within the classroom, school, school yard and community are an essential element of future collaboration between and amongst the key stakeholders in this area of learning. The proposed minimum standards provide a starting point from which to ensure consistent access for all students while fostering improved partnerships between public sector agencies such as school boards and conservation authorities in meeting student learning needs in an efficient, effective manner.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 3 – Rethink greenspace to maximize its value

Strategy 5 – Foster sustainable citizenship

Strategy 7 - Build partnerships and new business models

DETAILS OF WORK TO BE DONE

With a consistent set of minimum standards for access to out-of-classroom learning, the broader system of school boards, conservation authorities and other government agencies can better coordinate resources and assets as well as identify and allocate long-term funding in support of these activities at the same time as realizing improved operational efficiencies and measuring overall performance. Furthermore, this set of minimum standards is forward-looking in recognizing a continued need for student learning experiences in nature as the GTA continues to urbanize and grow and the pressing challenges of climate change remain.

Following endorsement of the above framework, TRCA staff will work with area school boards to undertake a detailed assessment of the out-of-classroom learning system including existing capacity for implementation of the minimum standards, gap analysis by grade level of the framework, as well as initial system-wide strategic recommendations related to meeting current and future student learning needs where gaps remain or exist.

In addition to Task Force Recommendation #2 related to consistent access and curricular standards for student learning in the out-of-doors, the Task Force and TRCA's Board of Directors endorsed the following recommendations:

Recommendation #3: Establish a Unified Performance Measurement System

Recommendation #4: Advance Shared-Ownership and Access Models That Enhance and Sustain an Overall Out-Of-Classroom Learning System

Recommendation #5: Develop a Long-Term Equitable Access Financial Plan

With endorsement of a minimum access and curricular standards, the Committee can begin work on Recommendations #4 and #5 with support from TRCA staff and the Natural Science and Education Staff Working Table, following which specific performance measures as per Recommendation #3 can be developed.

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Date: March 11, 2022