

Natural Science and Education Committee Agenda

March 17, 2025 6:30 P.M.

The meeting will be conducted via a video conference Members of the public may view the livestream at the following link: https://video.isilive.ca/trca/live.html

Members:

Garry Tanuan, Chair Stan Cameron Monique Forster Angela Grella Pamela McCarthy Deborah Oldfield Anu Sriskandarajah Connie Tang Thomas Thomas David West

Pages

- 2. ACKNOWLEDGEMENT OF INDIGENOUS TERRITORY
- 3. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF
- 4. APPROVAL OF MINUTES OF MEETING #3/24 HELD ON NOVEMBER 25, 2024

Minutes Link

- 5. DELEGATIONS
- 6. PRESENTATIONS
 - 6.1 CELEBRATING 50 YEARS OF THE BOYD ARCHAEOLOGICAL FIELD SCHOOL

Presented by Ian Rodhouse, Supervisor, Community Outreach and Education, Toronto and Region Conservation Authority, and Loren Scott, Senior Archaeologist, Toronto and Region Conservation Authority (TRCA).

6.2 THE IMPORTANCE OF INDIGENOUS PERSPECTIVES IN CHILDREN'S ENVIRONMENTAL INQUIRY

Presented by Haley Higdon, Program Director, Natural Curiosity.

7. CORRESPONDENCE

8. ITEMS FOR ACTION OF THE NATURAL SCIENCE AND EDUCATION COMMITTEE

8.1 SURVEY OF TEACHERS REGARDING OUT OF CLASSROOM LEARNING

Update and information pertaining to a survey of teachers from Greater Toronto Area (GTA) schools designed to assess current barriers to participation in out-of-classroom learning related to natural science, conservation and the environment. 4

10

8.2 ANNUAL PRESENTATIONS TO BOARD OF TRUSTEES

To support ongoing engagement with participating school boards, Toronto and Region Conservation Authority (TRCA) proposes to provide joint presentations on the work of the Natural Science and Education Committee (NSEC) to Boards of Trustees.

8.3 ESTABLISHMENT OF AN AD-HOC ADVOCACY AND AWARENESS WORKING GROUP

Establishment of an Ad-Hoc Advocacy Working Group specific to Natural Science and Education Committee (NSEC) activities.

9. ITEMS FOR INFORMATION OF THE NATURAL SCIENCE AND EDUCATION COMMITTEE

10. NEW BUSINESS

11. ADJOURNMENT

NEXT MEETING OF THE NATURAL SCIENCE AND EDUCATION COMMITTEE #2/25, TO BE HELD ON MAY 15, 2025 VIA VIDEO CONFERENCE

Darryl Gray, Director, Education and Training

/jh

Items for the Action of the Natural Science and Education Committee

TO:	Chair and Members of the Natural Science and Education Committee Monday, March 17, 2025 Meeting
FROM:	Darryl Gray, Director, Education and Training

RE: SURVEY OF TEACHERS REGARDING OUT OF CLASSROOM LEARNING

KEY ISSUE

Update and information pertaining to a survey of teachers from Greater Toronto Area (GTA) schools designed to assess current barriers to participation in out-of-classroom learning related to natural science, conservation and the environment.

RECOMMENDATION:

THAT any input from the Natural Science and Education Committee (NSEC) Trustee Members prior to its finalization be received;

AND THAT the 2025 Survey of Teachers be circulated to appropriate School Board staff for distribution to inform work of NSEC to identify and address barriers to the delivery of outdoor education programs.

BACKGROUND

Toronto and Region Conservation Authority (TRCA) regularly engages with professionals from within the education system including teachers, administrators, education assistants and others, in order to understand and respond to changing and evolving needs within this particular line of conservation authority work. This engagement takes many forms, including ongoing dialogue with teachers, administrators or staff booking and/or visiting TRCA facilities, program or facility-related surveys or participation at teacher conferences.

In 2010, recognizing an ongoing decline in school participation in field trips to TRCA facilities and partner attractions, a survey of teachers was conducted to assess perceived or real barriers to out-of-classroom learning. The survey was intended to assist TRCA and partner organizations in understanding barriers to participation in out-ofclassroom learning, along with the development of potential solutions or opportunities to remove barriers to participation.

The survey was conducted from February 4, 2010 to April 14, 2010 and circulated through TRCA's various education and school networks including school boards, the Ministry of Education, conservation authorities, practitioner associations and other organizations. Completion of the survey was voluntary with 631 respondents participating in the survey and provided a snapshot of some of the barriers that teachers at the time faced when planning an out-of-classroom learning experience for their students.

While the survey was primarily targeted towards practicing teachers, a small percentage of administrators and other education professionals completed the survey. Of the total number of respondents, teachers comprised 92.2% of those completing the survey.

On average responding teachers had been employed within the teaching profession for 13.3 years and were planning on taking, or had taken, their class on an average of 3.4 field trips in that given year. In asking respondents to identify specific barriers to participation in field trips from a select list, the following were the top five responses based on percentage selected:

1) Cost/Funding:	80.8%
2) Transportation Costs:	71.0%
3) Bus Timing and Availability	30.4%
4) Liability/Risk Management	25.7%
5) Policies	25.2%

What, if any, are the major barriers that exist in taking part in a field trip?					
		Response Percent	Response Count		
Policies		25.2%	159		
Cost/Funding		80.8%	510		
Transportation Costs		71.0%	448		
Bus Timing and Availability		30.4%	192		
Personal Time Requirements		12.7%	80		
Workload		17.9%	113		
Awareness of Field Trip Opportunities		17.4%	110		
Liability/Risk Management		25.7%	162		
Parent Buy-In or Concerns		10.6%	67		
Complexity of Planning/Process		18.2%	115		
There Are Currently No Barriers		2.2%	14		
	Other (please specify)				
	answered question		631		
	skippe	d question	0		

The following is a complete summary of all responses:

RATIONALE

Responses from the 2010 Survey of Teachers were used by TRCA to inform decision making related to fundraising activities, budget planning, advocacy, policy refinement and other mechanisms that were and are intended to remove barriers to participation in out-of-classroom learning. The NSEC and TRCA staff working with school boards are utilizing the results of the above survey to identify and remove barriers to equitable access.

Given the work of NSEC, TRCA is preparing to release an updated survey in 2025 to understand what, if any, changes to perceptions of barriers to participation might have occurred since 2010. This survey will also serve to inform continued collaboration between TRCA and area school boards in serving students of the Greater Toronto Area in the provision of out-of-classroom learning related to natural science, conservation and the environment.

Following discussions at the September 23, 2024 NSEC Leadership Session the survey has been updated to reflect the current context related to specific barriers to participation. Additionally, NSEC Staff Working Table, comprised of staff from participating area school boards and TRCA staff, reviewed and provided feedback on the draft survey.

2025 Survey of Teachers Perceptions of Field Trips Questions

- Please select one of the following: Teacher
- Education Assistant
- Principal
- Administrator
- Other

Please select your school board:

Select One

What grade do you teach:

- JK/SK
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- Grade 8
- Grade 9
- Grade 10
- Grade 11

- Grade 12
- N/A

How many years have you been in the teaching profession?

• Numerical Answer

How many field trips have you taken, or are planning to take, your students on during this school year?

• Numerical Answer

How many *nature-based or outdoor education* field trips have you taken (or are planning to take) your students on during this school year?

• Numerical Answer

How many field trips did you, on average, take your students on:

- 5 Years Ago
- 10 Years Ago

What, if any, are the top three major barriers that exist in taking part in a field trip? (Select Up To Three)

- Policies
- Cost/Funding
- Transportation Costs
- Bus Timing and Availability
- Personal Time Requirements
- Workload
- Volunteers/Supervisors
- Curriculum Demands
- Awareness of Field Trip Opportunities
- Liability/Risk Management
- Parent Buy-In, Reluctance or Concerns
- Complexity of Planning/Process

• There Are Currently No Barriers

Open ended questions:

- What do you see as the key benefits of outdoor learning?
- What do you see at the barriers to getting outside in your school yard?
- Do you have any other comments you would like to provide?

Relationship to TRCA's 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 3 Community Prosperity:

3.1 Connect communities to nature and greenspace

Pillar 3 Community Prosperity:

3.3 Informed citizens are conservation champions

Pillar 2 Knowledge Economy:

2.3 Advocacy and adaptability in the face of policy pressures

FINANCIAL DETAILS

There are no financial implications related to this report. Any work associated with the 2025 survey will be included in TRCA staff work plans.

DETAILS OF WORK TO BE DONE

TRCA will continue to work with staff from area school boards and NSEC members to finalize and circulate the 2025 Survey of Teachers in Q1 2025.

Report prepared by: Darryl Gray, Director, Education and Training Email: darryl.gray@trca.ca For Information contact: Darryl Gray, (416) 791-0327 Email: darryl.gray@trca.ca Date: November 4, 2024

Items for the Action of the Natural Science and Education Committee

- **TO:** Chair and Members of the Natural Science and Education Committee Monday, March 17, 2025 Meeting
- **FROM:** Darryl Gray, Director, Education and Training
- RE: ANNUAL PRESENTATIONS TO BOARDS OF TRUSTEES Request to provide joint presentation on the work of the Natural Science and Education Committee to participating Boards of Trustees.

KEY ISSUE

To support ongoing engagement with participating school boards, Toronto and Region Conservation Authority (TRCA) proposes to provide joint presentations on the work of the Natural Science and Education Committee (NSEC) to Boards of Trustees.

RECOMMENDATION:

WHEREAS NSEC has been convened to advance shared school board and conservation authority goals specific to out-of-classroom learning related to natural science, conservation and the environment;

AND WHEREAS it is desirous to support NSEC members in engaging School Board Trustees and Boards of Trustees in the work of the Committee;

THEREFORE LET IT BE RESOLVED THAT following each NSEC meeting, the Clerk and Manager, Policy distribute summaries of NSEC meeting minutes and discussions to participating school boards;

AND FURTHER THAT commencing in Q2 2025, joint NSEC Trustee and TRCA presentations on the work of NSEC be provided to Boards of Trustees on an annual basis.

BACKGROUND

TRCA has a long history of providing updates to Boards of Trustees of Greater Toronto Area school boards via presentations at Board meetings, informal meetings and communications. These presentations, meetings and communication have been intended to share the work of TRCA, including ensuring school boards have adequate information on TRCA and School Board MOUs, TRCA's Flood Forecasting and Warning Program, the work of the Natural Science and Education Committee, ongoing partnerships specific to out-of-classroom learning related to natural science, conservation and the environment, and other aligned priorities as appropriate.

Previous presentations have led to improved overall engagement by Trustees and Board staff and helped support ongoing partnerships while raising the profile of out-of-classroom learning related to natural science, conservation and the environment.

RATIONALE

With the onset of the COVID-19 pandemic, TRCA staff paused presentations to Boards of Trustees. Additionally, with the establishment of the Outdoor Education Task Force and the subsequent NSEC, TRCA staff have focused on engaging Trustee members of the NSEC through committee meetings and reports. Recent feedback from NSEC members has indicated that enhanced information for participating Boards of Trustees would improve engagement overall.

With NSEC having advanced specific goals related to the development of a set of minimum standards for access to out-of-classroom learning, an advocacy agenda and other key objectives, it is appropriate to provide joint TRCA/Trustee updates to Boards of Trustees.

Relationship to TRCA's 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 3 Community Prosperity:

3.1 Connect communities to nature and greenspace

Pillar 3 Community Prosperity:

3.3 Informed citizens are conservation champions

Pillar 2 Knowledge Economy:

2.3 Advocacy and adaptability in the face of policy pressures

FINANCIAL DETAILS

Activities related to presentations and sharing information with School Boards are accounted for under the Education Management Account 365-01.

DETAILS OF WORK TO BE DONE

TRCA staff will develop presentation materials that reflect both local school board and GTA-wide partnerships and priorities and work collaboratively with NSEC Trustees and Board staff to schedule and deliver update presentations. Additionally, TRCA Education staff will work with TRCA Clerk and Manger, Policy to circulate NSEC meeting summaries to NSEC members and to the Clerks of participating school boards.

Report prepared by: Darryl Gray, Director, Education and Training Email: darryl.gray@trca.ca For Information contact: Darryl Gray, (416) 791-0327 Email: darryl.gray@trca.ca Date: January 27, 2025

Items for the Action of the Natural Science and Education Committee

- TO: Chair and Members of the Natural Science and Education Committee Monday, March 17, 2025 Meeting
- **FROM:** Darryl Gray, Director, Education and Training

RE: ESTABLISHMENT OF AN AD-HOC ADVOCACY AND AWARENESS WORKING GROUP

KEY ISSUE

Establishment of an Ad-Hoc Advocacy Working Group specific to Natural Science and Education Committee (NSEC) activities.

RECOMMENDATION:

WHEREAS AT MEETING #3/24 held on November 25, 2024, the NSEC endorsed an Advocacy Agenda specific to seeking improved funding to remove barriers to access to out-of-classroom learning related to natural-science, conservation and the environment;

AND WHEREAS it is desirous to develop a coordinated approach to raising awareness around the shared school board and TRCA priorities specific to out-of-classroom learning, including, but not limited to, advancing adoption of policies related to minimum standards of access, unified performance measurement systems, and others;

THEREFORE LET IT BE RESOLVED THAT an Ad-Hoc Working Group comprised of up to four (4) members of NSEC be convened from amongst its membership or other appropriate school board appointees as recommended by NSEC.

BACKGROUND

At Meeting #3/24, held on November 25, 2024, NSEC endorsed an advocacy agenda which is intended to be used by school board officials and TRCA to raise awareness of both the gaps and opportunities to strengthen the overall system of out-of-classroom learning related to natural science, conservation and the environment.

In order to focus efforts related to advocacy, key messages were developed to support Trustees, TRCA Board Members and others working

in this regard. The advocacy agenda is intended to highlight key messages in support of shared goals of area school boards and TRCA, in this case specifically to ensure equitable access for all students to nature-based learning, enabled through enhanced funding for student learning in nature. The following are the key messages and outcomes:

MAIN AND SUB-MESSAGES:

Main Message:

Students in the highly urbanized Greater Toronto Area, and other urbanized areas of Ontario, experience significant inequity as it relates to both learning in, for and about nature, as well as regular access to nature.

Sub-Message 1:

Student experiences in nature improve learning outcomes related to natural science, conservation and the environment, as well as providing mental health and wellness benefits.

Sub-Message 2:

An investment in nature-based out-of-classroom student learning is an investment in the future appreciation and conservation of the unique and unparalleled natural resources of Ontario.

OUTCOMES:

Recognition within Ministry of Education Policy that every student in Grades 2, 4, 7 and 9 is to receive out-of-classroom learning related to natural science, conservation and the environment.

Benefit 581,000 students across Ontario through the allocation of \$79M (\$32M for Toronto and Region Boards) in annual funding for students in Grades 2, 4, 7 and 9 to access out-of-classroom learning related to natural science, conservation and the environment (colloquially known as outdoor education experiences).

Dramatically improved out-of-classroom learning opportunities for students in the Province, including improved learning outcomes in target curriculum areas related to natural science, conservation and the environment.

RATIONALE

In an effort to ensure coordination and leverage existing Trustee and TRCA Board Member relationships with Provincial Ministers and Ministries, TRCA staff are proposing an ad hoc advocacy working group of NSEC specific to raise awareness about the importance of establishing equitable standards of access for all students, including enhanced funding for out-of-classroom learning related to natural science, conservation and the environment.

The establishment of an ad hoc working group would allow for a coordinated approach to raising awareness about the work of NSEC and area school boards in the area of out-of-classroom learning related to natural science, conservation and the environment.

To realize the shared objectives and goals of participating school boards and TRCA, TRCA staff are proposing an Ad Hoc Advocacy Working Group comprised of members of NSEC which will meet on an as-required basis to formalize the previously endorsed advocacy program. Expectations of members would be to attend meetings as necessary, advocate with Government of Ontario Ministers, MPPs and officials and generally raise awareness of the work of NSEC in improving access to nature-based learning for students of Ontario.

Relationship to TRCA's 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 2 Knowledge Economy:

2.3 Advocacy and adaptability in the face of policy pressures

Pillar 3 Community Prosperity:

3.1 Connect communities to nature and greenspace

Pillar 3 Community Prosperity:

3.2 A culture of diversity, equity and inclusion contributing to community well-being

Pillar 3 Community Prosperity:

3.4 Inspired communities take environmental action

FINANCIAL DETAILS

There are currently no financial implications or costs associated with this report. As additional advocacy materials and campaigns are developed

further costs may be incurred or resources required. These will be funded through TRCA's Education and Training Operating Budget.

DETAILS OF WORK TO BE DONE

Pending endorsement by NSEC, TRCA staff will work with the Ad Hoc Working Group to finalize and execute on the endorsed Advocacy Agenda, including targeted outreach initiatives with the Minister of Education and other key Ministry and sector stakeholders. TRCA staff will provide secretariat function, coordinate meetings and prepare necessary materials based on the needs and requirements of the Ad-Hoc Working Group.

Regular reporting of progress will be provided to NSEC.

Report prepared by: Darryl Gray, Director, Education and Training Email: darryl.gray@trca.ca For Information contact: Darryl Gray, (416) 791-0327 Email: darryl.gray@trca.ca Date: February 25, 2025