

# May 2025 Draft

# **Climate Action Plan**

## **The North Stars**

#### 1. Mino Pimatisiwin (Wellbeing for all):

Promote the holistic wellbeing of students, staff, and communities, as well as the more-than-human world, by integrating mental, emotional, and physical health into climate action initiatives.

#### 2. Planetary Regeneration:

Commit to practices that restore and revitalize ecosystems through land stewardship, fostering a healthier Earth for future generations.

#### 3. Lasting Peace:

Cultivate a culture of peace through education that emphasizes collaboration, respect for nature, and an understanding of the interconnectedness of all living things.

This Climate Action Plan is the result of a year-long journey of learning, collaboration, and collective hope through the Seven Oaks School Division Climate Action Collaborative Learning Team.





PRIORITY AREAS Climate Justice and Ethic of Care

Indigenous Teachings & Land Based Learning

Climate Adaptation, Mitigation, Measurement and Accountability

Student-Led Climate Action

Collaborative Community Action

Contact: Heather Eckton

Climate Action Divisional Teacher Team Leader Seven Oaks School Division

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### Land and Water Acknowledgement

Seven Oaks School Division would like to acknowledge that we are gathered here today on Treaty 1 territory, traditional waters of the Anishinaabeg, Ininewuk, Anisininewuk, Dakota Oyate, and Denesuline, and on the National Homeland of the Red River Métis.

We live, work, learn and play in Treaty 1 territory in Winnipeg, that comes from the western Cree word Wînipêk, which means muddy waters. We live in the massive Lake Winnipeg watershed that runs through the traditional lands of 8 treaties, treaties 1-7 and 10, and leads into Lake Winnipeg, the 10<sup>th</sup> largest freshwater lake in the world.

Indigenous peoples have cared for these lands and waters since time immemorial and continue to champion land and water protection initiatives such as the Seal River Watershed Indigenous protected area in Northern Manitoba, and the Magpie River in Quebec, the first river in Canada to be granted legal personhood and rights.

Indigenous wisdom teaches us an Ethic of Care and Reciprocity with the land, forming a deep connection to the Earth. When we are connected to the land, it is not simply a memory from childhood, it becomes an integral part of who we are. We hope that we can ensure that the land acknowledgements we share in schools, extend beyond words, transforming into actionable commitments that promote the health of the land, air, and water, while supporting a stable climate for all.

May we come together in a good way, guided towards our North Stars of *mino pimatisiwin*, the good life for all, planetary regeneration and peace. Let us continue our journey of Truth and Reconciliation, by learning from Indigenous wisdom and moving forward in partnerships with all people.





### **Students Demand Action**

On **December 9, 2019,** the Seven Oaks School Division School Board declared a **Climate Emergency** after a presentation by the Seven Oaks Student Climate Crisis Collective. The Board acknowledged the climate emergency and endorsed the collective's request, referring detailed recommendations to division administration and the Policy Committee for development.



Figure: Seven Oaks Student Climate Crisis Collective

#### Navigating by Our North Stars: Our Climate Action Vision



Kick Off Gathering of the Climate Action Leadership Team, December 2024

On December 5th, 2024, the Seven Oaks School Division began an inspiring journey toward developing a Climate Action Plan. Our Climate Action Collaborative Learning Team, consisting of 30 dedicated individuals, including superintendents, trustees, divisional principals, administrators, educators, student leaders, and key guests gathered to vision the path ahead. United by our commitment to creating a more



beautiful world, we engaged in transformative discussions, each of us bringing unique perspectives and expertise. Guided by our North Stars, *mino pimatiwisin* for all (a good life for all), planetary regeneration, and lasting peace. We are setting out to turn actionable commitments into lasting change, aiming to create a positive impact for future generations.

## **Climate Action Leadership Team**

#### **Superintendents Team Leads:**

- 1. Tony Kreml, Superintendent
- 2. Heather Marks, Assistant Superintendent -Curriculum and Instruction

#### **Trustee Leadership:**

- 3. Maria Santos, Ward II, Maples and Amber Trails
- 4. Derek Dabee, Ward II, Maples and Amber Trails
- 5. Evan Krosney, Ward III, Garden City, West Kildonan, Riverbend and Rivergrove

#### **Climate Action Collaborative Learning Team:**

- 1. Heather Eckton Climate Action Divisional Teacher Team Leader
- 2. Fortunato Lim Anti-Racism Divisional Principal
- 3. Joey Robertson Divisional Principal
- 4. Adam Hildebrandt- Principal, West Kildonan Collegiate
- 5. Nancy Janelle Principal, Seven Oaks School Division
- 6. Jennifer Lamoureux Vice-Principal, James Nisbet School
- 7. Bela Ferreira Outdoor Learning Support Teacher, Forest Park School
- 6. Swati Prabhakar Learning Support Teacher, Governor Semple School
- 7. Naomi Dennie Educator, Grades 1-2, O.V. Jewitt School
- 8. Lindsay Torio Educator, Grades 9-12, Garden City Collegiate
- 9. Johanna Riley French Immersion Educator, Leila North
- 10. Carolyn Jefferson French Immersion Educator, Leila North
- 11. Scott During Middle Years Educator, H.C. Avery
- 12. Tony Campos Director of Operations
- 13. Burley Townsend Assistant Director of Operations
- 14. Alexis Nazeravich Program Developer, Aki Centre
- 15. Dana Valente Director of Transportation
- 16. Monica Gadsby Tech Hub Coordinator

#### **Student Leadership:**

- 17. Kim Abellar- Collège Garden City Collegiate
- 18. Rhyz Bravo Collège Garden City Collegiate
- 19. Aurelia Miro Collantes- Maples Collegiate
- 20. Manal Fawaz -Maples Collegiate
- 21. Ishwin Rana Maples Collegiate
- 22. Riya Rudan Maples Collegiate
- 23. Raymond Phillip Mendoza Maples Collegiate
- 24. Emily Mann Maples MET School
- 25. Sydney Del Rosario- Maples MET School
- 26. Lily Klos Seven Oaks MET School
- 27. Niqui Lampa- Seven Oaks MET School
- 28. Hanna Buller West Kildonan Collegiate
- 29. Ariana Sumar West Kildonan Collegiate

## **Visioning the Future**

By the time a kindergarten student in the Seven Oaks School Division enters Grade 5 in 2030, we will have made significant strides towards becoming a "Good Ancestor." This visioning exercise outlines the transformative journey Seven Oaks School Division aims to undertake by 2030. By the time a kindergarten student enters Grade 5, we will have set clear, ambitious goals to create a climate resilient, and environmentally conscious school division.



Figure: 5-year targets and beyond (DPS, 2024)

		Visioning the Future: Climate Action
Child's Age	Year	Our Collaborative Learning Team began by envisioning a series of achievements, big-picture ideas, and innovations for the future of education in Seven Oaks School Division. Our hopes are to transform learning, empower students, and build a resilient, inclusive, and sustainable community for the future.
5	2025	<ul> <li>We envision a future where our schools start dedicating 30% of schoolyards to biodiversity by 2030 in line with the Montreal Biodiversity Pledge.</li> <li>Seven Oaks leads the way as the first Prairie School Division to set Climate and Carbon targets in alignment with the international Paris Agreement.</li> </ul>
10	2030	<ul> <li>Across Canada, all buses transition to electric fleets, following the example set by Seven Oaks, creating cleaner, greener communities.</li> <li>We envision a future where we take better care of our gardens, creating environments that lead to both nature and human wellbeing.</li> <li>We commit to reducing paper waste and adopting practices that minimize environmental impact.</li> <li>SOSD has model gardens, inspired by Aki, allowing for biodiversity yearround, serving as a model for schoolyards across Canada.</li> <li>Seven Oaks transforms 30% of its schoolyards into fully naturalized, revitalized landscapes that actively contribute to carbon sequestration.</li> </ul>
30	2050	<ul> <li>We lead the way with the adoption of the most advanced green and renewable energy technologies, reducing our reliance on fossil fuels.</li> <li>A collective shift toward renewable energy sources powers our communities, supporting Green Careers for students.</li> <li>Seven Oaks becomes the first carbon negative school division in Canada</li> </ul>
		setting a global example of environmental leadership and innovation.
80	2100	• We envision a world where global temperatures stabilize, working toward a future where the Earth's climate returns to pre-industrial levels for the health of all life.

## **Prioritizing Our Path Forward:**

### **Priority Areas for the Plan**

- 1. Climate Justice and Ethic of Care
- 2. Indigenous Teachings & Land Based Learning
- 3. Climate Adaptation, Mitigation, Measurement and Accountability
- 4. Student-Led Climate Action
- 5. Collaborative Community Action

## **Expanding Our Priority Areas:**

As part of the development of our Climate Action Plan (CAP), we conducted a Dotmocracy exercise to identify and expand on key priority areas. This collaborative approach allowed our team to vote on the most critical priorities, providing clear direction for our next steps. The following priority areas emerged from this process:

- 6. Engage Stakeholders and Community Strengthen involvement and connections with stakeholders, students, and the broader community (20 votes).
- 7. Prepare Students for Green Careers Equip students with career development opportunities and curriculum aligned with the green economy (18 votes).
- 8. Create Regenerative Systems Move beyond reducing environmental impact to building regenerative systems that recognize humanity's role in the solution (15 votes).
- **9.** Act with Urgency Prioritize immediate, impactful action to address climate change (14 votes).
- **10. Promote Collaboration, Continuous Improvement and Innovation** Ensure collaboration and innovation to ensure equitable access to healthy ecosystems (10 votes)





These ten priority areas will guide our ongoing journey.

The Climate Leadership within Canadian School Boards 2023 Review outlines the following recommendations for School Boards:

#### School Boards, Districts, and Authorities:

- **Develop Holistic Climate Action Plans**: Create a whole-institution climate action plan that outlines clear greenhouse gas emission targets and climate action initiatives at all levels of school governance.
- Enhance Policy Transparency: Ensure that climate policies are readily accessible to the public, fostering transparency and allowing community members to engage and understand the board's commitment to environmental stewardship.
- Allocate Staff and Resources: Devote dedicated staff time and financial resources to the implementation and ongoing support of climate action initiatives.
- **Collaborate with Local Authorities**: Create collaborative partnerships with municipal authorities and climate policy experts to develop a climate action plan that aligns with regional priorities and leverages collective expertise (Field & Howlett, 2023).



### The full report is available online here:

Field, E., Howlett, S. (2023). Climate Leadership within Canadian School Boards: 2023

Review. https://climatechangelearningcanada.org/2023-review/

## **Categories for the Climate Action Plan**

#### 1. Governance:

Revisiting climate action plans and school plans to ensure long-term climate adaptation and mitigation strategies. This includes evaluating existing policies, securing financial support for effective implementation, and engaging staff in climate action initiatives.



Figure: Climate Action Leaders Seven Oaks School Division 2024-2025

#### 2. Climate Change Education- Curriculum, Teaching, and Learning:

Focuses on integrating sustainability and climate education into K-12 through Climate Action Pedagogy. This includes developing teaching strategies that promote critical thinking, experiential learning, land-based teachings and interdisciplinary approaches to understanding climate issues.







#### 3. Land Stewardship:

Focuses on responsible land stewardship through socio-cultural restoration, drawing inspiration from the Aki Centre. This includes creating model schoolyards with trees for shade, outdoor classrooms, and enhanced biodiversity. The plan aligns with initiatives like the 30x30 and the Montreal Biodiversity Pledge, promoting practices that restore healthy environments and provide students with hands-on learning experiences in nature.







#### 4. Sustainable Facilities and Operations:

Focuses on implementing sustainable practices in school facilities and operations, such as decarbonization, waste reduction, and water conservation. Aim to create environmentally friendly school environments that model sustainable practices for students and staff and to reach the targets in line with scientific consensus of the Intergovernmental Panel on Climate Change Report.





**5. Transportation:** Focuses on reducing the environmental impact of transportation related to school operations, including student commutes, staff travel, and school-related transportation. Strategies may include promoting active transportation (walking, biking), increasing the use of electric or low-emission buses, and encouraging carpooling or ride sharing programs. The goal is to reduce greenhouse gas emissions, decrease traffic congestion, and improve air quality, while also fostering sustainable transportation habits among students, staff, and the community.

#### 6. Building Capacity and Partnerships for Climate Action:

Aims to enhance the skills and knowledge of educators, students, and staff regarding

sustainability practices. This includes professional development opportunities, promoting green careers and resources to foster a culture of climate action within the school community. Encourages collaboration with local organizations, businesses, and community stakeholders to support climate initiatives. This category focuses on creating synergies that enhance educational experiences and community engagement in sustainability efforts.





To read the full testimonials, simply scan the QR code provided.









## Methodology: Participatory Action Research (PAR)

Participatory Action Research (PAR) is a collaborative research methodology that actively involves stakeholders in the process of inquiry and change. It emphasizes the importance of collective action, reflection, and shared democratic decision making in addressing social issues and creating meaningful solutions.



Figure: Action Research Cycle (Educational Leadership Council, 2015)



### Where are we now?

## **International Treaty: The Paris Agreement**

On December 12, 2015, Canada and 194 other countries reached the Paris Agreement, an Internationally treaty to address the scope and urgency of Climate Change.

#### The 2030 Target (IPCC, 2022)

 The International Panel on Climate Change (IPCC, 2022) states that to keep within the 1.5 °C limit, we must reduce greenhouse gas (GHG) emissions by 43% by the year 2030 (compared to 2019 levels) in order to reduce the danger of reaching tipping points or irreversible catastrophic impacts, followed by a net-zero status is 2050.

#### The 2050 Target (IPCC, 2022):

• Net-zero global emissions by 2050 to maintain a path that limits warming to 1.5°C.

For the **2°C** pathway, a reduction of **~25-30%** from 2019 levels by 2030 is recommended, with global emissions reaching **net-zero by 2070**.



Eighty percent of the world's remaining biodiversity is cared for by Indigenous Peoples. -Indigenous Leadership Initiative, 2024

## **Climate Change Impacts**



Observed (1900-2020) and projected (2021-2100) warming relative to pre-industrial temperatures (1850-1900). Projections relate to very low emissions (SSP1-1.9), low emissions (SSP1-2.6), intermediate emissions (SSP2-4.5), high emissions (SSP3-7.0) and very high emissions (SSP5-8.5). Temperatures are colour-coded from the pre-industrial average (blue-grey) through to current warming of 1.1C (orange) and potentially more than 4C by 2100 (purple). Source: IPCC (2023) Figure SPM.1



## How is Climate Change impacting Manitoba?

Figure: Impacts of Climate Change in Manitoba (Government of Manitoba, n.d.)



## The Cost of Inaction

## Economic Impacts on Manitoba Families

• Manitoba has the **3rd most** climate sensitive economy in Canada, meaning climate change could lead to lower incomes and higher costs, like more expensive food.

Figure: Damage Control Report, Canadian Climate Institute, 2022.

## **Mental Health Impacts on Youth**

- **Rising climate anxiety** (Galway & Field, 2023; Hargreaves & Shirley, 2021).
- 78% of Canadian youth (16-25) say climate change negatively affects their mental health, with nearly half extremely worried about its impact on people and the planet (Galway & Field, 2023).
- Action Learning is crucial for empowering learners and reducing anxieties. (Baudon & Jachens, 2021; Bright & Eames, 2022; Csutora, 2012; Galway & Field, 2023; Kwauk & Casey, 2021, Kelsey; 2020; Okada & Gray, 2023, UNESCO, 2024).

Postavar Loneliness Loneline

**Climate Emotions Wheel** 

Figure: Climate Mental Health Network, 2024.

## The Difference Between 1.5°C and 2°C of Warming

IMPACTS AT 1.5°C AND 2°C OF WARMING				
DIRECT IMPACTS	1.5°C	2°C	2°C IMPACTS	
<b>EXTREME HEAT</b> Global population exposed to severe heat at least once every five years	14%	37%	2.6X WORSE	
SEA-ICE-FREE ARCTIC Number of ice-free summers	AT LEAST 1 EVERY 100 YEARS	AT LEAST 1 EVERY 10 YEARS	10X worse	
SEA LEVEL RISE Amount of sea level rise by 2100	0.40 METERS	0.46 METERS	0.06m more	
SPECIES	1.5°C	2°C	2°C IMPACTS	
SPECIES LOSS: VERTEBRATES Vertebrates that lose at least half of their range	4%	8%	2X worse	
SPECIES LOSS: PLANTS Plants that lose at least half of their range	8%	16%	2X worse	
SPECIES LOSS: INSECTS Insects that lose at least half of their range	6%	18%	<b>3X</b> worse	
LAND	1.5°C	2°C	2°C IMPACTS	
Amount of Earth's land area where ecosystems will shift to a new biome	7%	13%	1.86X WORSE	
• O • Amount of Arctic permafrost that will thaw	4.8 MILLION KM <sup>2</sup>	6.6 MILLION KM <sup>2</sup>	38% worse	
Reduction in maize harvests in tropics	<b>3%</b>	7%	2.3X worse	
OCEANS	1.5°C	2°C	2°C IMPACTS	
<b>CORAL REEFS</b> Further decline in coral reefs	<b>O</b> <sup>70–</sup> 90%	<b>O</b> 99%	UP TO <b>29%</b> WORSE	
Image: Second system       FISHERIES         Image: Second system       Decline in marine fisheries	<b>1.5</b> MILLION TONNES		2X worse	

Figure 16: The difference in projected climate impacts between 1.5°C and 2°C of warming. Source: IPCC 2018.



## Greenhouse Gas Inventory for Seven Oaks School Division

### Table 1: Greenhouse Gas Emissions Summary

Seven Oaks School Division Climate Impacts			
2023 GHG Emissio	ons tCO <sub>2</sub> e		Equivalent
Total Emissio	ons for SOSD (tCO <sub>2</sub> e)	3,837.62	100%
Building (Stationary Combustion)	Direct: Natural Gas	2,727.01	
			71.2%
	Indirect: Electricity		
		6.52	
Vehicles and Equipment (2023)	Direct		28.8%
• 60 School Buses (Gas and Diesel)		1,104.10	
• 13 buses are 10+ years			

tCO<sub>2</sub>e = total carbon dioxide equivalent (including carbon dioxide, methane, and nitrous oxide)

Reporting	2017	2018	2019	2020	2021	2022	2023	2024
Date								
Year of					2020	2021	2022	2023
Emissions								
Buildings	2,552.40	2,903.09	3,152.29	N/A	2927.57	2,750.47	2,733.52	2,358.68
Vehicles	1,004.49	1,021.44	1,235.24	N/A	790.08	1,040.58	1,104.10	1,223.71
and								
Equipment								
Total								
emissions	3,556.89	3,924.53	4,387.53	N/A	3,717.65	3,791.05	3,837.62	3,597.86
(tCO2e)								

#### Table 2: Understanding our Baseline GHG Emissions overtime

Figure 1: Projects Greenhouse Gas Emissions of Buildings and Operations vs. Transportation in Seven Oaks School Division from 2020-2028



Data source: Environment Canada, Canada's Greenhouse Gas Inventory, <u>http://www.ec.gc.ca/ges-ghg</u> Chart by: Climate Change Connection, <u>http://climatechangeconnection.org</u>

## Where are we now?

## **Buildings and Operations**

Presentation by Tony Campos, Director of Operations and Burley Townsend, Assistant Director of Operations

#### **Building and Operations Emissions Overview**

- Energy Star Portfolio Manager (2022): Canada's tool for tracking emissions in buildings, with data going back to 1999.
- **SOSD Data**: Tracks energy consumption for 30 buildings, covering a total of 1.5 million square feet.
- Energy Breakdown: 51% natural gas and 39% electricity (some sites are 100% electric).
- **Exclusions**: Contracted services like snow removal are excluded from GHG emissions calculations.

#### Province of Manitoba & SOSD Collaboration

- **Province Owned Buildings**: Manitoba collects green building data which includes water consumption and kilowatt hours.
- **Success Story**: West St. Paul received a new building envelope, resulting in a steep decline in natural gas use in 2023.
- Manitoba Hydro: Provided lighting upgrades to LED across the division.

#### Sustainability Certifications and Building Design

- LEED Certification:
  - Amber Trails: LEED Platinum
  - o Templeton: LEED Gold
  - Riviere Rouge: LEED Gold
- Building Longevity: Schools are designed to last 100 years, earning waste diversion points in LEED certifications.

#### Water & Energy Innovations

## "Data turns Discussion into Decisions."

Leeann Kittle, Director of Sustainability, Denver Public

- Digital Sensors (EDC): Used in schools to monitor energy efficiency.
- Gray Water Use:
  - Amber Trails Community School
  - École Rivière Rouge

- New School on Murray Road
- **Geothermal Systems**: Three buildings currently use geothermal systems, with a fourth (New School on Murray) planned to add this system.

#### **Green Careers and Student Engagement**

• **Student Interest**: Students are increasingly interested in learning about green careers and sustainability practices.

#### Challenges

• Electric Vehicle Charging Stations: Vandalism issues hinder the full implementation of EV stations.

# <u>Next Steps</u>: Identify Capital Investment Projects with the Greatest Impact on Reducing Greenhouse Gas Emissions and Increasing Energy Efficiency:

- **Expand Geothermal Systems**: Expand the use of geothermal heating and cooling systems in additional buildings, beyond the three existing and the planned new school, to further reduce natural gas use and lower overall emissions.
- **Invest in Energy Efficient Upgrades**: Prioritize capital investment in energy-efficient building upgrades, such as building envelops; improved insulation, windows, and HVAC systems, to reduce the division's reliance on natural gas and electricity. This could include retrofitting older buildings with modern energy-efficient technologies.
- **Solar Panel Installations**: Implement solar energy systems on building rooftops to generate renewable energy, reduce electricity demand from non-renewable sources, and lower overall emissions.
- Increase Electric Vehicle (EV) Infrastructure: Address vandalism issues and expand the number of EV charging stations across the division, supporting the transition to electric vehicles and encouraging sustainable transportation.
- **Renewable Energy Integration**: Consider integrating renewable energy sources, such as solar panels or wind turbines, in new or existing school buildings to further reduce electricity consumption from non-renewable sources.
- Water Efficiency and Gray Water Expansion: Expand the use of gray water systems and digital sensors to additional schools in the division, promoting water conservation and further reducing environmental impacts, while also exploring opportunities for rainwater harvesting.
- Make Building and Operation Data Publicly Accessible: Make building and operation data, such as energy usage and emissions data, publicly available to educators and students for use in teaching and learning, fostering greater engagement in sustainability initiatives and providing real world data for educational purposes.

## Where are we now?

## **Transportation**

#### Presentation by Dana Valente, Director of Transportation

#### **Transportation Emissions Overview**

- **Daily Bus Ridership**: 3,200 students ride the bus every day.
- **Buses**: Seven Oaks has 64 buses, with 62% running on diesel and the rest on gasoline.
- **Daily Travel**: Buses cover 6,000 km per day for student transportation, with 240 run segments.
- Annual Distance: The buses travel 1.5 million kilometers per year.
- Field Trip Emissions: Approximately 20% of fuel is used for field trips.
- Field Trip Statistics: There are about 8,300 field trips per year.



#### **Buses and Costs**

- Charter Bus Costs: \$170 per return trip.
- **Provincial Walking Rule**: Students living 1.6 km or less from school are expected to walk, as per provincial regulations.
- **Bus Coverage**: Seven Oaks buses students in grades 7-12, while other divisions bus up to grade 6.
- Electric Bus Cost: New Flyer Electric buses range from \$350,000 to \$500,000.
- **Current Bus Cost**: Current diesel or gasoline buses cost \$165,000 + tax.
- **Bus Lifespan**: Current buses last 12-13 years, after which they are sold or stripped for parts.
- **Oldest Bus**: The oldest bus in the fleet is from 2009.
- **Newest Bus**: The newest bus is from 2024.

#### Service Vehicles

• Fleet: In addition to buses, there are 18 service vehicles, which run on diesel or gasoline.

#### **Electric Bus Initiatives**

• **Donation**: In 2023, Seven Oaks donated a diesel bus to Red River College for conversion into an electric bus. However, safety concerns still surround the conversion process.



#### Where are we now?

### Land Stewardship

#### Information provided by Alexis Nazeravich, Program Developer Aki Centre

The following table presents data on composting and school gardening initiatives from the Aki Centre to participating schools within Seven Oaks School Division. Over the years, Ozhaawashkwaa Animikii-Bineshi Aki Onji Kinimaagae' Inun, Blue Thunderbird Land-based Teachings Learning Centre has grown in both scope and impact, with schools increasing their compost collection efforts and engaging in eco-cultural practices, such as growing Indigenous plants and working with Elders and Knowledge keepers to offer ceremony and teachings. Additionally, the number of edible gardens and vegetables grown across schools has increased significantly. This data reflects the division's ongoing commitment to environmental stewardship, Indigenous knowledges, composting and gardening.

(Na	(Nazeravich, 2024)					
School Year	Attendance	Compost Collection (lbs)	Eco-Cultural: # of Indigenous Plants Grown	Edible Gardens: # of Vegetables Grown		
2018- 2019	729					
2019- 2020	2,495	9501 lbs, 23 schools	510 for schools 1,800 for Aki Centre			
2020- 2021	2,302	10,673 lbs, 20 schools	910 for schools 1,942 for Aki Centre	2,334 plants		
2021- 2022	4,566	12,999 lbs, 26 schools	1,004 for schools 990 to community 1,828 for Aki Centre	2,595 plants		
2022- 2023	4,667	18,803 lbs, 30 schools	2,135 for schools 800 for community 1000 for Aki Centre	2,600 plants		
2023- 2024	4,965	21,1276 lbs 30 schools	957 for schools, 3,500 for Aki Centre	2,600 plants		

 Table 3: Composting and School Gardening Data from Aki Centre to Schools



### Where are we now?

### Governance

Information provided by Heather Eckton



Figure: Climate Action Leadership Forum, 2024

Since the fall of 2023, every school in Seven Oaks School Division has had at least one Climate Action Leader or a team of Climate Action Leaders. Many schools have established student Climate Action or Eco-groups. Our Climate Action Collaborative Learning Team will meet several times to engage in Participatory Action Research to develop a Climate Action Plan that includes diverse voices.



Figure: Climate Action Leadership Team 2023-2024

## Where are we now?

## Climate Change Education – Curriculum, Teaching and Learning

Information provided by Heather Eckton

- 1. Student Action Projects: Development, Implementation and Amplifying Student Voices SOSD is committed supporting student-led climate action projects with a focus on climate action, reducing Greenhouse gases (GHG's), land regeneration and transformational learning experiences. We have supported a variety of learning initiatives, including:
  - Climate Action Forums and Student-led Climate Action Symposiums
  - UNESCO Associated Schools Project Network in Manitoba
  - Sustainable Futures Schools, Learning for a Sustainable Future
  - Student Workshops and mentorship for Student-led Climate Action Projects
  - Be An Upstander Project, Canadian Museum for Human Rights
  - Climate Justice Month in Seven Oaks School Division
  - Climate Action Student Groups
  - Climate Action Book Clubs
  - Human Rights Film Festival
  - Global Competencies Education
  - Caring For Our Watersheds
  - Model United Nations Assembly
  - Future Cities Competition
  - Public Speaking and Debate
  - STEAM (Science, Technology, Engineering, Art and Math) Fest



#### 2. Whole-School Transformation

- Seven Oaks School Division has six UNESCO schools: West St. Paul, Garden City Collegiate, Maples Collegiate, Leila North, Amber Trails and A.E. Wright.
- In addition, we have three Sustainable Future Schools (Learning for a Sustainable Future); Collicutt, James Nisbet and Leila North.
- Conducted Participatory Action Research with dedicated teachers, administrators, and students focusing on whole-school approached to climate action, such as UNESCO schools and Sustainable Future Schools.
- Facilitated a two-day Sustainable Schools Residency Programs with five school teams from École Leila North, James Nisbet, O.V. Jewitt, Collicutt and H.C Avery Schools.
- Led the Manitoba Teacher's Society (MTS) Climate Action Collaborative Learning Team in a year-long study on whole-school transformation for Climate Action.

#### 3. Climate Change Education Professional Development

• Organized and facilitated Climate Change education professional development (PD) and workshops to enhance climate change education, aligning with the New Learning Framework for Manitoba.

#### **Climate Action Professional Development Days:**

- 1. West St. Paul, September 22, 2024
- 2. James Nisbet, October 2, 2024 & June 7, 2024
  - 3. Collicutt School, November 1, 2024
    - 4. Forest Park, November 1, 2024
      - 5. Victory, November 1, 2024
    - 6. O.V. Jewitt, November 3, 2024
  - 7. Riverbend School, January 22, 2024
    - 8. Elwick School, January 26, 2024
  - 9. Leila North School, February 2, 2024
  - 10. Garden City Collegiate, March 15, 2024
    - 11. A.E. Wright, May 6, 2024
    - 12. Margaret Park School, May 13, 2024
  - 13. Edmund Partridge School, May 17, 2024
- 14. Maples Collegiate, Global Competencies, November 4, 2024
  - 15. A.E. Wright, PLC Action Project, November 6, 2024
    - 16. James Nisbet School, January 31, 2025
      - 17. A.E. Wright, June 6, 2025

#### Where are we now?

#### **Building Capacity and Partnerships for Climate Action**

The following partnerships play a crucial role in strengthening our capacity for quality Climate Change Education in Seven Oaks School Division.

- Canadian Red Cross
- Learning for a Sustainable Future
- UNESCO Associated Schools Project Network of Manitoba
- Canadian Museum for Human Rights
- Climate Change Connection
- Educators for Climate Action Manitoba
- University of Manitoba
  - Environmental Conservation Lab, UofM
- University of Winnipeg
- Engineers for Tomorrow
- Green Action Centre
- Educators for Climate Action
- Efficiency Manitoba



Figure: Manitoba Teachers' Society Climate Action Collaborative Learning Team 2024-2025.

## Key Takeaways from SOSD Visit to Denver Public Schools (DPS)



**Figure**: From left to right, Heather Marks (SOSD Assistant Superintendent), Kelly Moses (Program Manager of School Sustainability), Leeann Kittle (Executive Director of Sustainability), Heather Eckton (SOSD Climate Action DTTL), Abigail Harkey (Program Manager for School Sustainability), Lainie Rosner (SOSD Educator), Christopher Woodburn (Program Manager, Land Stewardship and Community Gardens).

- <u>Interactive Website</u> and **Publicly Accessibly** <u>Climate Action Plan</u>: Helps build transparency, trust, and community engagement.
- Climate Action Policy-Driven Approach

Denver Public Schools has a formal **Climate Action Policy** developed through 2 years of student advocacy:

"DPS shall be a national leader in establishing an organizational culture anchored in sustainability, climate action, and environmental justice in both the conservation of natural resources and minimization of the carbon footprint of DPS' practices."

• DPS uses a Policy governance model means the board sets direction; superintendent implements direction.

#### • Student Leadership & Recognition

- Students led policy development and organized petitions (4000+ signatures).
- Seal of Climate Literacy: diploma endorsement for students engaged in climate learning and action.
- <u>Climate Champions Program</u>: student-led projects can receive up to \$25,000 which is funded through the City of Denver Climate Protection Fund generated from a 0.25\$ sales tax.

#### • Financial Strategy

- Climate work saves **\$5.6 million/year** through smart energy and infrastructure investments.
- Quarterly meetings with CFO; access to bond funds, grants, and rebates.
- Financial Impact Assessment and GHG Inventory guide decisions.

#### Student Engagement

• Annual events (STEAM Expo, Climate Summit) and community storytelling strengthen climate culture.

#### • Teaching & Learning

- Integrated Climate Change Education across subjects.
- Free summer PD with stipend and portfolio.
- Emphasis on PBL, Indigenous knowledges, and partnerships with universities and artists.

#### Operational Actions

- Electrification of buses, solar carports, community gardens.
- GHG Inventory: 83% emissions from buildings, followed by transport and waste.
- Strategic rollout: Energy  $\rightarrow$  Gardens  $\rightarrow$  Curriculum  $\rightarrow$  Waste.

#### • Guiding Wisdom

- Build relationships, celebrate small wins, support passionate leaders.
- Know your audience, move them forward one step at a time.
- "Make climate action fun!" and embed hope and identity into the work.



Figure: Denver Public Schools Interactive Website for Climate Action <a href="https://sustainability.dpsk12.org/">https://sustainability.dpsk12.org/</a>

## SOSD Climate Action Educator Survey

Final Report October, 2023

### THE RATIONAL FOR CLIMATE ACTION IN SCHOOLS

- Climate Change is the most pressing issue on the planet. Its cause is undeniably anthropogenic, and immediate action is required in schools (NASA, 2022; United Nations, 2020, IPCC 2022).
- Most Canadians (64%) feels the education system should do a lot more to educate young people about climate change and a dominant view (75%) believe climate change education should aim to change the way people behave (Schwartzberg, Stevens & Acton, 2022).

#### **SURVEY RATIONAL & PARTICIPANTS**

- The intent of the survey was to gain valuable insights into how to best support teachers and students in the Seven Oaks School Division in taking climate action within schools.
- The survey had a total of 95 educator respondents.
   n=33 Senior years, n=30 Early years, n=27 middle years n=5 other

#### **SURVEY DETAILS**

#### The Need for Capacity Building

 37% of Seven Oaks School Division teachers feel they have the knowledge and skills needed for quality climate change education, slightly higher than the Canadian average of 34% (Schwartzberg, Stevens & Acton, 2022).

I feel well-informed about climate change and skilled in engaging my students in highquality climate change education.

95 responses



### CLIMATE EDUCATION SUPPORTS Requested

Which of the following types of educational support would interest you in enhancing your teaching of climate change?

Supports requested by respondents	Percentage of
	educators
<ol> <li>Guest Speakers: Facilitate access to experts and climate action leadership who engage with students and share real-world insights.</li> </ol>	75.8%
2. Student Engagement: Ideas for student-led actions.	67.4%
3. Curriculum Integration: Resource for teaching climate change.	61.1%
4. Professional Development: Workshops, webinars, or training sessions.	60.0%
5. Action Projects: Help students to identify, develop and implement action projects	56.8% s.
6. Funding Opportunities: Grants and funding sources.	46.3%
7. <b>Resource Libraries:</b> Digital climate change educational materials.	44.2%
8. Co-planning and Networking: Connect educators for collaboration.	41.1%
9. Mentorship: Pairing with experienced mentors.	36.8%
10. <b>Customized Support:</b> Support based on individual educator needs and preferences.	28.4%

CLIMATE CHANGE INSTRUCTIONAL TIME IN SEVEN OAKS SD

On average, how many hours do you spend in your classes teaching and learning about climate change?

95 responses



Canadian averages (LSF, 2022) Not covered = 35% 1-2 hours = 14% 3-5 hours = 17% 6-10 hours = 10% 11+ hours = 13 %

Not covered/Not applicable

1-2 hours
3-5 hours

6-10 hours11 + hours

### GAINS IN CLIMATE EDUCATION

In which areas do you believe your school could achieve the most progress in terms of climate action?

Supports requested by respondents	Percentage of
	educators
1. Meaningful teaching and learning about climate change.	73.7%
2. Enhancing student voice in climate action.	62.1%
3. Waste reduction and responsible consumption.	62.1%
4. <b>Biodiversity initiatives</b> that allow schoolyards to support local biodiversity.	37.9%
5. <b>Sustainable Energy:</b> Installing solar panels and/or wind energy projects at the school to allow for education on sustainable energy.	42.1%
6. Growing food and restoring land.	37.9%
7. <b>Retrofits</b> to the school building to conserve energy and water.	35.8%
8. Sustainable Transportation	30.5%



Figure: West Kildonan Collegiate Circle Garden

## **SOSD Climate Action and Sustainability School Survey**

### 2025 Results

What **opportunities for improvement** would help our school take more meaningful climate action?

Increased funding for climate initiatives More PD on CCE and Sustainability More PD on Indigenous Education and Treaty Education More PD on Outdoor Learning/Land-Based/Place-Based Education Expanded Green Infrastructure on School Grounds Better integration of Climate Education across Subjects Access to Expert Help in Climate Change Education and PD on CCE

29 responses





Figure: Climate Change Education Professional Development Day and Panelists at Garden City Collegiate

#### What barriers prevent out school from taking more meaningful climate action?



29 responses

#### Whole-School Approaches Towards Transformational Learning

Is your school a **UNESCO** (full or candidate school) or a **Sustainable Future School** (Learning for a Sustainable Future)?

School	UNESCO school	<u>Sustainable</u> <u>Future</u> <u>School</u>	Both
Garden City Collegiate	V		
West St. Paul	$\checkmark$		
Maples Collegiate	✓ (candidate school)		
Leila North	✓ (candidate school)	V	$\checkmark$
Amber Trails	✓ (candidate school)		
A.E. Wright	✓ (candidate school)	V	$\checkmark$
Collicutt		V	
James Nisbet		V	

- Currently, 28% of schools in SOSD are designated as UNESCO schools, UNESCO candidate schools, or Sustainable Future Schools.
- Another 40% of schools in the Seven Oaks School Division are not yet members of the UNESCO Associated Schools Network or the Manitoba Schools for Sustainability (SFS) but have expressed interest in exploring these opportunities.



Figure 1: LSF's Sustainable Future Schools Framework

## UNESCO Associated School Project Network (ASPnet) in Manitoba

Established by the United Nations in 1953, the UNESCO Schools connects 11,500 **schools** across **182 countries** to promote UNESCO ideals, global citizenship, student leadership, and social justice. There are currently 36 UNESCO Schools across Manitoba. ASPnet schools engage in curricular and extracurricular projects focused on:

- World concerns and the role of the United Nations
- Human rights and Democracy
- Intercultural learning
- Climate Justice and Environmental

Figure 2: UNESCO Schools of Manitoba

If yes, is this recognition displayed on your school website? 23 responses



Note: There are opportunities to improve communication and increase the visibility of schools taking a whole-school approach by highlighting these efforts more prominently on school websites.



Figure: Climate Artivism created by K–12 students and educators were on exhibition at the UNESCO Schools "Be an Upstander" Student Showcase, held on May 22, 2025, at the Canadian Museum for Human Rights. The muskrats and North Star Woman were conceptualized by Indigenous artist Leah Fontaine. The nature soundscape was guided by Métis educator Jennifer Engbrecht and created by K-6 students.

What is your North Star for climate action leading to a more beautiful world?

## Buildings and Operations by Age: A Snapshot.

Green Schools are schools that teach students to care for the Earth, including sustainable practices, and community engagement.





Figure: Victory School retrieved from Winnipeg Tribune 1922, (Manitoba Historical Society Archives)



Figure: Amber Trails Community School named 'Greenest School in Canada'

(Photo credit Prairie Architects, 2017).

**Climate Action and Sustainability Checklist**: Please indicate which of the following are implemented at your school that you are aware of:

#### 29 responses



#### **Overview of Climate/Eco Student and Staff Groups in SOSD**

Based on responses to a recent survey, several SOSD schools have active Climate or Eco groups involving both students and staff. These groups vary in size, structure, and frequency of meetings. Some groups meet weekly, while others gather around specific events or initiatives. Group names and years of establishment also vary, reflecting each school's unique approach to climate action and sustainable living.

Note: This overview includes only those groups reported in the survey and may not capture all climate or eco initiatives currently taking place across the division.

#### 1. Nature Club (École Rivière-Rouge)

- Leader: Climate Action leader
- Members: ~20 students
- Frequency: Meets once per cycle at lunch recess
- **Focus:** Gardening (vegetable, Indigenous gardens), community involvement in summer gardening, environmental initiatives in winter.
- Established: 2023

#### 2. Climate/Eco Student Group (A.E. Wright)

- Leader: Climate Action leader
- Members: newly formed group of 6-8 students
- Focus: Vermicomposting, leading Green New World initiatives
- **Special Projects at School:** Take Me Outside, Gardening that involved the staff, students, and families; staff and students' awareness of the use of reusable bottles and meal containers; recycling markers; recycling bins and compost bins in each classroom.
- Established: 2024-2025





#### 3. Compost Crew and Gardening Club (Edmund Partridge)

- Leaders: 6 students involved in compost crew, and 8 students in gardening.
- Frequency: Once a cycle (compost), gardening club, twice a week.
- Established: 2024

#### 4. UNESCO Group (West St. Paul)

- Leaders: Staff and students involved in UNESCO Associated Project Network of Manitoba
- Focus: Student-led Climate Action Projects
- Reducing waste, sustainability, advocacy with staff

#### 5. UNESCO Group (Amber Trails)

- Leaders: 3 staff members and 3 students involved in UNESCO Associated Project Network of Manitoba
- Frequency: monthly meetings
- Focus: Our main goals is to grow the group to collaborate with our exiting ESD student group and take part in more school/community climate actions.
- Established:2024

#### 6. Climate Action Team / Land-Learning Club (H.C. Avery)

- Leader: The work has slowly moved from 2 to nearly half of teaching staff at our school. We started with a small garden bed to nearly 20% of our grounds as an "Earth Centered" learning space.
- Members: ~15 students
- Frequency: Meets weekly
- Focus: Environmental action, climate-focused initiatives.

#### 7. Classroom Initiatives (R.F. Morrison)

- Leader: Various teachers and classrooms
- **Focus:** Recycling, composting, and other Earth friendly initiatives led by different classrooms.

#### 8. Garden and Nature Club (Forest Park)

- Leader: Teacher and co-teacher
- **Members:** ~10 students
- Frequency: Meets weekly
- **Focus:** Seed saving, medicine picking, tree planting, bird feeder filling, planning for future gatherings.
- Established: on and off for many year
- Special Projects: Tree creation for school assembly to be used for climate action ideas.





#### 9. Eco-Crew (Maples Collegiate)

- Leader: 2 staff members and 3 Tri-Presidents!
- Members: ~15 students
- Frequency: Meets Thursdays after school for 1 hour
- Established: 2011
- Focus: Eco initiatives, sustainability, community involvement
- Special Initiatives: Compost crew: walking around every second Thursday at lunch and educating the student body about composting. Community Clean-Up: Got most of the school involved Eco-Week and many students participating in activities focused on sustainability
   Pumpkin Smash: Diverted large amounts of biomass from the landfill Existence of the Eco-Crew with regular, dedicated, hard-working individuals.



#### 10. Eco Warriors (Leila North)

- Leader: 2 staff members
- Members: ~6 regulars, 3-4 occasional
- Frequency: Once per cycle at lunch, planning for after school meetings once per month
- Focus: Month long Eco challenges, school-wide events, field trips (e.g., school-wide clothing swap, participated in the Momentum for Change Youth Forum, World Water Day at Manitoba Museum, Earth Day Rally at the Leg, Fort Whyte Climate Action and Sustainability Workshops, would like to go on a field trip to the Winnipeg dump and recycling plant)
- Established: 2024-2025



#### 11. Nature Club (Governor Semple)

- Leader: 2 staff members
- Members: 5 students
- Frequency: Meets Wednesdays for 1 hour
- Focus: Taking care of the trees in our school yard and creating posters to raise awareness about proper ways to recycle at school are some of the things that we are proud of.
- Established: October 2024

#### 12. Garden Club (O.V. Jewitt Community School)

- Leader: 2 staff members
- Organized by grade level focus:
- Keepers of the Recycling (Grade 1-3)
- Keepers of the Compose (Grades 4-5)
- Keepers of the Trees (Grade 6)
- Keepers of the Indigenous Gardens (7-8) and partnered with kindergarten to explore outdoor learning.



- Leaders: Two teachers
- Members: Compost Crew: 3-4 students; Gardening Club: 3 students
- **Frequency:** Meets once a week for both clubs during lunch
- **Focus:** Circle Garden, recycling and composting, dimmer switches for lights (some classrooms) and automatic lights (some rooms).
- Established: Current school year (2024-2025)

#### 12. Équipe Vert (Green Club, École Belmont)

- Leader: Not specified
- Members: Not specified
- Frequency: Meets weekly
- Focus: Learning, action projects, and green initiatives

#### 13. ESD Staff Action Group (Elwick School)

- Leaders: Staff members
- Frequency: A few times a year
- Focus: Community cleanups, composting, recycling, community garden boxes
- **Special Project:** Changing our breakfast and lunch programs to be much less wasteful (eliminating single use cutlery and dishes)



### 14. Eco Warriors (James Nisbet)

- Leader: 4 staff
- Members: 20 students
- Frequency: Every Tuesday at lunch
- **Focus:** Organize school events and assemblies as well as created an outdoor learning space in their schoolyard.
- Established: January of 2024

#### **Climate Change Education Checklist**

Please indicate which of the following sustainability and climate action initiatives are currently being implemented at your school that you are aware of:





### A) Land Stewardship/Gardens/Biodiversity

Please indicate which of the following sustainability and climate action initiatives are currently being implemented at your school that you are aware of:



Funding for Schoolyard Initiatives/Gardens: How were the schoolyard initiatives or gardens funded?

29 responses



## Reducing barriers and challenges to your school gardening initiatives:







## B) Land-Based, Place-Based Outdoor Learning

29 responses



How often do the majority of students at your school engage in outdoor/place-based/land-based learning each month?

29 responses





Figure: Opening and Naming Ceremony with Elder Derek and Elder Ellen Cook of Wii kongay win Agamik in front of Garden City Collegiate on May 23, 2025. This Anishnaabemowin name translates to an invitation to the place or the lodge, the 'spot' where student learning for Climate Justice and Truth and Reconciliation comes alive!

## C) Sustainability Community Engagement and Events



**Sustainable Facilities and Operations:** Please indicate which of the following sustainability and climate action initiatives are currently being implemented at your school that you are aware of:

#### 29 responses



## **School Audits:**

Please indicate which of the following school audits are currently being implemented by students or staff at your school that you are aware of: 29 responses







**School Nutrition Program: Sustainable Eating:** On a scale of 1 to 5, how effectively does your school promote sustainable eating practices, climate-friendly foods, and culturally diverse food options?

### (1 = not effective, 5 = very effective)

Consider practices like **plant-based meals**, **local**, **seasonal food sourcing**, and **promoting sustainable food choices**.



**School Nutrition Program: Zero-Waste:** On a scale of 1 to 5, how effectively does your school implement zero-waste practices in its food programs?

### (1 = not effective, 5 = very effective)

Consider practices like using reusable dishes, avoiding plastic packaging, and reducing food waste.



**Energy Consumption & Efficiency:** How would you rate our school's efforts to reduce energy consumption (e.g., using energy-efficient lights, turning off and unplugging unused equipment)?



**Water Conservation:** On a scale of 1 to 5, how effective is your school's system for reducing water use?

(1=not effective, 5=very effective). Consider systems like low-flow toilets, water refill stations, recycled gray water systems, rainwater harvesting, and water-efficient landscaping.



29 responses

**Water Reduction & Recycling:** On a scale of 1 to 5, how effective is your school's recycling, waste reduction, and composting program?

(1=not effective, 5=very effective). Consider aspects like recycling bins, composting systems, waste diversion initiatives, and zero-waste goals.



**Sustainable Transportation:** Respondents were asked to identify which sustainability and climate action initiatives related to **transportation** are currently being implemented at their schools. Multiple selections were allowed. The following initiatives were most reported:

29 responses



**Building Capacity and Partnerships for Climate Action:** Respondents were asked whether their schools had partnered with specific organizations in the past four months in relation to Caring for the Earth, Sustainability, or Climate Action. Multiple responses were allowed. The results indicate a strong engagement across several key community partners. Below is a summary of the most frequently selected organizations:

29 responses





Figure: Elder Ellen Cook and teachings on protecting the Sturgeon when considering Hydro Electric projects.

Additional Climate and Sustainability Action in Your School: As part of the survey, schools were asked to indicate which climate action and sustainability initiatives are currently being implemented in their buildings. Respondents could select multiple options. The responses highlight a variety of ongoing efforts across the division.

29 responses







### **Open-Ended Questions**

Celebrating our Climate Action Successes in SOSD: What successes have you seen at your school related to climate action and sustainability that you are most proud of?

### 1. Outdoor Learning and Land-Based Education

Schools across the division are deeply integrating outdoor and land-based learning practices, often rooted in Indigenous ways of knowing.

- "We have an excellent garden on the first floor which helps students with project and community-based learning."
- "Composting program, community gardens, engagement of classes at the Aki Centre, focus on outdoor learning."
- "Land Based experiential learning, land-based learning, indoor gardening, collab with other schools, independent student inquiry projects, climate based internships."
- "The creation of our outdoor learning space!"
- "We are also a school that has prided itself over the last four years into going outdoors and ensuring that some of the learning that traditionally has taken place in classrooms is occurring in nature."
- "Prioritizing Land and climate as the major focus of the Grade 10 year... students are exposed to it in grade 9... and carry that learning forward into individual projects in grade 11/12."

## 2. Gardening and School Green Spaces

Gardening initiatives are among the most celebrated successes, providing hands-on, intergenerational, and culturally meaningful opportunities.

- "Take Me Outside, Gardening that involved the staff, students and families."
- "Prairie restoration garden which has lasted now 2 summers and being 'passed down' from one group of students to another."
- "Reviving our raised garden beds."
- "Many teachers at AEW give their students great gardening opportunities."
- "Our gardening club and our compost crew."
- "Farm growth with raised garden beds, Indigenous sacred garden, mindful paper usage."

#### **3.** Composting and Waste Reduction

Composting programs and broader waste reduction practices are widespread and seen as deeply impactful.

- "Own school compost program, using reusable towels rather than paper towels."
- "On site composting."
- "Large compost bins for bigger school events that involve food."
- "Students are passionate about compost."
- "Pumpkin Smash Diverted large amounts of biomass from the landfill."
- "Compost crew walking around every second Thursday at lunch and educating the student body about composting."
- "The school raised funds to excite classes to compost and it made a huge difference in the amount of compost collected for the month of March."

### 4. Student-Led Initiatives and Engagement

Student leadership is at the heart of many successful projects, especially in generating ideas, campaigning, and taking action.

- "A group of students have been quite dedicated this year... the students are the ones generating the ideas and deciding how to put things into action."
- "Students look forward to participate and meet during Nature Club. Their willingness to share their learning and wonderings with others around them displays their engagement and curiosity."
- "Student initiatives to campaign within the school in promotion of recycling, taking care of the school yard, composting and reducing the amount of water being wasted in the bathrooms and sinks."
- "Individual student projects and internships that engage in meaningful climate action and sustainability initiatives."
- "Students responded: Circle Garden, recycling and composting, dimmer switches for lights (some classrooms) and automatic lights (some rooms)."

### 5. School-Wide and Community Collaboration

Many responses highlighted the power of collective action among students, staff, families, and community partners.

- "The work has slowly moved from 2 to nearly half of teaching staff at our school... from a small garden bed to nearly 20% of our grounds as 'Earth-Centered' learning space."
- "Collaboration between students and staff to determine what is important and what needs to be focused on as a school."
- "Building compost and recycling duty into Met Monitors responsibilities such that all students now expect to participate in this."

- "Meaningful partnerships with community."
- "Growth as a school to being open to PD, school plan, new sustainability initiatives. Collective growth is happening and growing!"

### 6. Curricular Integration and Experiential Learning

Sustainability efforts are being embedded into curricular outcomes and experiential projects, reinforcing learning relevance and depth.

- "Individual student projects (e.g. Upstander, Caring for Our Watershed, Grade 12 projects)."
- "Students learn more about the big picture of climate change through Green New World :)"
- "Legacy projects and trips like traveling to Experimental Lakes, Shoal Lake 40, and Harvest Moon Society."
- "Understanding that it is not another extra separate thing to manage, it is integrated into staff and student wellness, community-building, Indigenous education, anti-racism, curricular outcomes, and rich learning."

### 7. Recycling and Resource Use Awareness

Ongoing efforts to reduce single-use materials and promote recycling are taking root in many schools.

- "Staff and students' awareness of the use of reusable bottles and meal containers."
- "Recycling markers; recycling bins and compost bins in each classroom."
- "Switching from paper towels to reusable towels."
- "Changing our breakfast and lunch programs to be much less wasteful (eliminating single use cutlery and dishes)."
- "Clothing Swaps and Terra Cycling initiatives."
- "Creating posters to raise awareness about proper ways to recycle at school."

### 8. Celebratory and School-Wide Events

Special events have proven effective in raising awareness and bringing communities together around sustainability.

- "Community Clean-Up Got most of the school involved."
- "Eco-Week Got many students participating in activities focused on sustainability."
- "Take Me Outside Day Most classes participate."

- "Successfully applied to and received grants for purchasing a shed, firepit supplies, French Drain supplies."
- "Began construction of an outdoor classroom/firepit."

**Challenges and Barriers:** What challenges/barriers have you faced in promoting climate action and sustainability at our school?

### **1. Time Constraints and Competing Priorities**

A dominant theme was the challenge of limited time in the school day, compounded by the competing demands of teaching, school events, and student programming.

- "Lack of time in the day."
- "TIME."
- "Time to facilitate the meetings, and overlapping of events or activities are one of the barriers..."
- "Time with everything else we are doing. It is very difficult to engage in whole-school initiatives or maintain groups and clubs..."
- "Ensuring that teachers have the time to take their students outdoors scheduled into their day..."
- "Overwhelmed with the amount of opportunities."
- "Everything can't be a priority, when we do that, it always ends in doing nothing well!"

### 2. Staff Capacity and Engagement

Schools are finding it difficult to engage and maintain participation among educators, particularly when leadership rests on a small core group.

- "Currently, the biggest challenge is the number of staff members involved in the initiatives."
- "Participation of students outside of the group."
- "Having teachers and classrooms consistently engaging in the space the outdoor space has sometimes become quite 'wild' and needs consistent care."
- "A lack of funding, space, and time."
- "We are a small school so it is difficult to make arrangements for interested staff to meet and discuss climate initiatives."
- "Asking staff to participate in many, many extra committees and events when there are only so many of us."

### 3. Student Engagement and Interest

While student leadership is a strength in many schools, others shared challenges with engagement, connection, and motivation.

- "Lack of student involvement is biggest challenge."
- "Getting students excited to participate without incentives."
- "Student interest. There is a LOT going on in the world to work on."
- "Students responded: lack of personal connection or misinformation, lack of student engagement [low amount of students in Environmental Studies]."

### 4. Systemic and Administrative Barriers

Several respondents cited obstacles stemming from division-level policies, administrative processes, and school-level infrastructure.

- "Divisional barriers such as the maintenance department processing requests."
- "Lots of barriers at administrative/divisional level to do even simple things such as plant trees."
- "People not hearing about what other people are doing so a lot of the great stuff... goes unnoticed or uncelebrated."
- "Being inside Maples Collegiate we do not always have the same autonomy over the building..."
- "money, divisional barriers."

## 5. Funding and Resource Limitations

Limited funding for tools, materials, or infrastructure upgrades was frequently mentioned.

- "Funding."
- "A lack of funding, space, and time."
- "Access to large amounts of gardening tools."
- "We work with what we have but we have definite limitations in what we can accomplish."
- "Successfully applied to and received grants... but this kind of external funding is not always sustainable."

### 6. Infrastructure Constraints

Older buildings, small green spaces, and lack of modern facilities were noted as structural barriers.

- "Our school is very old and has a lot of challenges in terms of... kitchen space for sustainable food... a small outdoor space... no air conditioning."
- "Standard non-adjustable fluorescent lighting (with the exception of a few classrooms that were recently renovated due to the roof leaking)."

### 7. Continuity and Sustainability of Efforts

Ensuring consistency and long-term care for climate initiatives remains a struggle, especially during transitions between years or staff members.

- "Consistency and continuity."
- "Climate action is not currently a top priority honestly."
- "Support and buy-in from staff and community."
- "Ostensibly, there isn't a culture of recycling/composting... so it feels like we're constantly starting from scratch."

### 8. Need for Professional Development and Whole-School Alignment

Respondents called for structured professional learning and a more coordinated school-wide approach.

- "We need to have more orientation, climate action PDs as a school to get everyone on board."
- "Differing beliefs on what is significant and impactful for climate action."
- "Time to build capacity for staff and students."
- "Working to strengthen teams in alignment with school vision and climate action."

### 9. Cultural and Community-Level Challenges

The broader school culture and community support (or lack thereof) was mentioned as a persistent barrier to systemic progress.

- "Support and buy-in from staff and community."
- "Just looking in our current recycling and composting bins on any given day, will sum it up. Waste is making its way to the bins, but not the way we'd necessarily like it to be!"
- "It's hard to straddle eco awareness and advocacy, without being annoying and repetitive."

### Recommendations for Improving Climate Action: Do you have any

recommendations for improving our school's sustainability and climate action efforts?

### 1. Time and Support for Planning and Leadership

Respondents consistently highlighted the need for dedicated time to plan, collaborate, and lead climate initiatives.

- "Need for more time for the climate leaders to begin and organize initiatives."
- "Time is needed to take the action."
- "Planning time on designated Wednesday afternoon meeting times has been very helpful."
- "Conducting waste audits, and collaboration with other school teams can support with planning processes and resource information needed..."

## 2. Staff Capacity and Leadership Roles

Several suggestions focused on establishing or strengthening staff leadership roles and promoting broader educator involvement.

- "Climate Learning Support Teacher PD or position, goal setting and responsibility setting."
- "Excite other educators to promote climate action within their individual classrooms."
- "Workshops for students to increase engagement."
- "Ways to share the responsibility in the middle years classrooms."
- "More people involved so if staff move the work continues."
- "Keep at er."

## 3. Setting Clear, Shared Goals

Schools are encouraged to collaboratively set meaningful, measurable goals and revisit them throughout the year.

- "Having some set goals at the beginning of the school year."
- "We need to concentrate on specific goals as a group."
- "Our students and staff have undertaken a number of climate initiatives. Moving forward, we need to give time to reflect on how these things can be better."
- "I think we are in a phase of needing to maintain the initiatives we have started. We always have outstanding projects that die. We want to keep the projects alive."
- "Using our developed School 'Keepers of the Earth' plan to continue pushing for new initiatives and growth in these areas."

### 4. Integration with Curriculum and Classroom Practice

Educators called for deeper curriculum connections and practical, hands-on student learning opportunities.

- "Need more integration of sustainability into the classroom. The grade 10 science curriculum is a good place for this."
- "Practical implementation through course work and internships, coaching with staff to make the practical exploration meaningful in student work."
- "Incorporate food production/gardening course."
- "Teaching more sustainable practices..."

#### 5. Engagement and Awareness-Raising

Several recommendations centered on increasing visibility, awareness, and celebration of school climate efforts.

- "Greater school social media presence for eco-initiatives."
- "KNOWING about all upcoming events, ideas easily accessible."
- "Highlighting local impacts."
- "Engage with assemblies for environmental concerns/issues."

#### 6. Infrastructure Improvements and On-Site Solutions

Respondents advocated for attainable on-site changes and long-term infrastructure improvements.

- "Working toward energy autonomy (through solar and wind) would be an excellent long-term goal."
- "Composting on-site would be a reasonably attainable goal in the near future versus sending it to the Aki Centre."
- "Our cafeteria could be more eco-friendly."
- "We are having trouble connecting our water collection equipment to our school."
- "Eliminating bottled water."

#### 7. Student-Led Action and Policy Engagement

Students suggested stronger action at the divisional level, and more opportunities for hands-on environmental learning.

- "Field trips to environmental conservation areas."
- "Promote walking, biking or taking public transport."
- "Having students plant Indigenous plants."
- "Develop divisional level policies to undertake sustainability initiatives."

### 8. Leadership Support and Whole-School Commitment

Respondents emphasized the critical role of school leaders in championing climate action across grades and programs.

- "Ensuring that administrators are aware of the urgency of climate action AND ensuring that they are aware that climate action looks different at all grade levels and then promoting it actively..."
- "No." / "N/A." (Not all staff felt they had something to add, which may point to a need for more collaborative dialogue and vision-setting.)

**Building an Effective School Climate Action Plan:** What do you think should be included in a School Climate Action Plan to effectively address environmental impact and promote sustainability?

## 1. Collaborative Visioning and Leadership

Respondents emphasized the importance of engaging a broad base of students, staff, and community members in developing the plan.

- "Climate Action Leaders in our school and those who are willing to be part should brainstorm and assess the impact of existing initiatives..."
- "Community engagement on sustainability goals, building staff capacity and knowledge..."
- "Clear goals, timelines, regular meetings, student involvement, community involvement, learning from each other..."
- "Student-staff-community responsibilities... small steps toward a larger goal."
- "Collective responsibility as well as top-down changes."

### 2. Actionable, Achievable Goals

Multiple suggestions pointed to the value of setting tangible, measurable, and locally relevant objectives.

- "Immediate actionable steps that are possible in our local context."
- "Concrete steps and classroom connections."
- "Setting specific, measurable goals for reducing carbon footprint and waste..."
- "Keep things achievable and measurable. Focus on an individual objective quarterly."
- "Small manageable steps for the school community to take to reduce their impact."

### **3.** Curriculum and Learning Integration

Teachers stressed the need for climate action to be embedded within teaching and learning.

- "Accountability for educators to develop/plug into experiences to engage their learners."
- "Ideas/lessons that can be done at each grade level."
- "Ways to incorporate data collection around specific sustainable initiatives within curricular learning."
- "Workshops for students."
- "Have a PD related to connecting climate action into curricular outcomes."

### 4. Indigenous Knowledges and Land-Based Learning

Some respondents called for a commitment to Indigenous ways of knowing and being in the land.

• "Conscious efforts of including Indigenous perspectives and land-based teachings when planning for sustainability goals."

### 5. Infrastructure and Systems Thinking

Suggestions included integrating building systems data and infrastructure improvements into the planning process.

- "School infrastructure budget and real-time access to data about energy/water use."
- "Push for technology to lower our water waste such as low-flow toilets and sinks."
- "Continue to landscape for more garden spaces for pollinators."

#### 6. Data-Driven and Evidence-Based Strategies

Respondents advocated for plans to include ways of collecting and using data for learning and accountability.



- "Ways to go about data collection projects in K–8 that are accessible and can inform future learning."
- "Implementing practical strategies to monitor progress to help teams stay accountable."
- Students responded: "Data collected from students (greening school grounds), ecological footprint analysis, waste reduction and recycling + composting, community clean-up (monthly)."

### 7. Student Leadership and SDG Alignment

There was strong support for youth leadership and aligning actions with global sustainability frameworks.

- "A focus on transformative student leadership and meeting the SDG and 30x30 goals."
- "Opportunities for students to get actively involved in forming sustainability action plans."

### 8. Active Transportation and Daily Practice

Respondents named daily routines and infrastructure that promote sustainability as important priorities.

- "A focus on active transportation. Promotion and opportunities."
- "Biking is huge ... something we can always keep promoting!"
- "Litter-less lunches and lights-out period during the day."
- "Set up a walking school bus and more opportunities for active transport."

**Ideas for Future Actions and School Climate Action Plan Priorities:** What specific steps should your school take for climate action and planetary regeneration? What should be included in a School Climate Action Plan?

#### 1. Land Restoration and Land-Based Learning Projects

Several responses support embedding hands-on, outdoor, and Indigenous-informed sustainability practices:

- "For now, we are starting the vermicomposting, and are planning to become a sustainable future school so that we can strengthen our knowledge and action to help protect the environment in a bigger scale."
- "Planting a medicine garden, pollinator garden, starting a club, resources, teachers."
- "Plant trees and develop an outdoor learning space on the school grounds."
- "I would like a rain barrel to support gardening initiatives."

• "Maintain the Prairie Restoration garden through a full cycle of students, so that the students who founded the project have been long gone but the legacy continues, and continuing to build our Grade 10 legacy projects are our top priorities. If we can succeed at these relatively small goals over a sustainable length of time, surviving some amount of staff and student turnover... we will have solid foundations in place to continue to grow our environmental initiatives."

### 2. Coherent Planning and School-Wide Integration

A strong theme is the need for a clear and shared plan that aligns current and future actions:

- "We do a wide variety of initiatives in our school that address climate action and planetary regeneration. Our next steps would be to focus on ways to create more cohesion and collaboration between all actions to connect them under one overarching goal/theme. A school climate action plan should be concrete, measurable, and achievable. Clarity and specificity is key."
- "We need to outline specific steps that allow the responsibility of climate action become a priority in our classrooms."
- "Integration of school plan with school climate action plan."
- "Roles assigned, goals clearly established and created as staff."

## 3. Curriculum Integration and Student Engagement

Respondents emphasized the importance of incorporating sustainability into everyday classroom experiences and student leadership:

- "Engaging leadership opportunities for student stewardship, integrating sustainability goals in curriculum, practicing sustainability as a way of living."
- "Educate educators on sustainability goals so that each class can take on and promote a different climate action goal."
- "Inclusion of climate education across the curriculum. Changes within classrooms as well as school-wide."
- Students responded: "Identify school visions and goals, provide more climate education and awareness, consider main targets, monitor and evaluate progress, engage the community (involve family, form partnerships in the community)."

### 4. Infrastructure and Policy-Level Changes

Longer-term actions require system-wide support and rethinking how schools operate:

- "In addition to the above ideas, I think greywater toilets are another way that we could really make our schools more sustainable. All these ideas are big, expensive, and long-term, but I do feel that the shorter-term stuff (gardening, recycling, composting) is well underway already."
- "Access to FREE TRANSIT PASSES FOR ALL STUDENTS in K-12. SOSD needs to get out of being in the business of bussing to the greatest degree possible!!"
- "Water/Rain Garden conservation, increased biodiversity pledge to 30x30."
- "Making sustainable choices regarding our waste, water and energy usage."
- "I think a reasonable goal for Elwick would be establishing technolgy and battery recycling depots for the community and focusing on our gardening projects we started last year!"
- "- Water, paper, car emissions, and waste reduction/conservation
  - Outdoor/indigenous ways of learning
  - Funds
  - 17 SDGs"

### 5. Time, Resources, and PD

To sustain and deepen the work, staff identified the need for dedicated time and resources:

- "A professional development day in 2025 school year to engage staff; work towards creating a school climate action plan."
- "We need to spend some time on this in the coming months as we plan forward for making more time and space for our climate action."
- "More money!"
- "Learning more about it."
- "Same as above."

### 6. Community Engagement and Action

Some suggestions focused on building wider connections and community momentum:

- "Have a gardening club. Could have outside organizations involved in..."
- "Yearly climate action marches for our division."

## Climate Action Plan for SOSD -Timeline Overview (Tentative)

Timeline	Climate Action/Activity		
	Phase 1: Initial Commitment (2019-2023)		
Dec 2019	<ol> <li>School Board declares climate emergency after a presentation from a collective of concerned students.</li> </ol>		
Sept 2023	2. Staffing dedicated to Climate Change Education (CCE).		
	Phase 2: Planning & Consultation (Oct - Dec 2024)		
Oct 2024	3. School Board initiates CAP consultation process.		
Nov 2024	<ol> <li>School Board initiates CAP consultation process.</li> <li>Establish a Climate Action Collaborative Learning Team, Communication Hub - Group Email List &amp; Google Drive</li> <li>Redesign Climate Action Website for SOSD focusing on 6 key elements:         <ol> <li>Whole-School Approaches                 <ul> <li>UNESCO schools (Currently 6)</li> <li>Sustainable Future Schools (Currently 2)</li> <li>Climate Action Leaders: Growing the Good</li> <li>Climate Action Plan (Coming Soon!)</li> <li>Eventually we could create a website like t exemplary model from Denver Public Schoo Boards [Website Link], showcasing the progress of our plan.</li> <li>Climate Action Report to the Community and Newsletters</li> <li>Webinars on Climate Change Education</li> <li>Climate Change Education-Research &amp; Literature</li> </ul> </li> </ol> </li> </ol>		

Timeline	Climate Action/Activity
Dec 5,	2024: Climate Action Collaborative Learning Team Gathering 1
Dec 5th, 2024	<ul> <li>6. First Climate Action Collaborative Learning Team gathering: North Stars, Guiding Principles and Participatory Action Research Where are we now? Where do we want to be? How are we going to get there?</li> <li>Phase 2: Action Items: <ol> <li>GHG Emissions Reduction Strategy (Building and Operation)</li> <li>GHG Emission Reduction Strategy (Building and Operation)</li> <li>GHG Emission Reduction Strategy (Transportation)</li> <li>Democratic Engagement <ol> <li>School Climate Change Audit Survey</li> <li>Community Engagement Survey</li> <li>Student Engagement Survey</li> </ol> </li> <li>Stakeholder Testimonials and Letters <ol> <li>Include students, educators, trustees, superintendents.</li> </ol> </li> <li>Climate Action Plans – looking at exemplars for other school board committees.</li> <li>Other?</li> </ol> </li> <li>Proposed meeting days: Dec 5, 2024 (full day), Feb 18, 2025, and Mar 12, 2025 (half day).</li> </ul>
Phase 3 -	- Subcommittee PAR- GHG Strategies, Surveys and Testimonials
	(Jan-Mar 2025)
Jan- Mar 2025	<ul> <li>Sub-Committee Participatory Action Research (PAR)</li> <li>Action: Begin sub-committee action-item work through Participatory Action Research: GHG strategies, surveys, stakeholder testimonials/ letters.</li> <li>Outcomes:</li> </ul>

Timeline	Climate Action/Activity				
	<ul> <li>GHG Emissions Reduction Strategy Model – Develop a model for how the school division can reduce emissions over time.</li> </ul>				
	<ul> <li>GHG Transportation Reduction Model – Develop a transportation-specific strategy for emissions reduction, including alternatives to car travel, improving bus systems, and promoting active transportation.</li> </ul>				
	<ul> <li>Climate Action Survey Development – Design and conduct surveys to gauge where the school division stands in terms of sustainability and climate action.</li> </ul>				
	<ul> <li>Stakeholder Engagement Letters – Collect written statements from various stakeholder groups:</li> </ul>				
	<ul> <li>Testimonials from Students – A collective statement from students expressing their views and commitments.</li> </ul>				
	<ul> <li>Testimonials from Educators – A collective statement from teachers and staff on how they are engaged in climate action.</li> </ul>				
	<ul> <li>Letter from Trustees – A statement from school board trustees on their commitment to climate action.</li> </ul>				
	<ul> <li>Letter from the Superintendent – A message from the superintendent to reinforce institutional commitment to the CAP</li> </ul>				
Feb 18,	2025: Climate Action Collaborative Learning Team Gathering 2				
<b>8.</b> This af	ternoon's meeting focused on refining the first draft of the Climate				
Action	Action Plan, finalizing the SOSD Climate and Sustainability School Survey,				
and <b>pr</b> Partici	and preparing for the upcoming climate Action Leaders Meeting. Participants shared testimonials for inclusion in the plan, brainstormed ideas for				
April's	April's Climate Action Month, and explored schoolyard land stewardship				
initiativ	es to support long-term climate resilience across the division.				

## Timeline

## **Climate Action/Activity**

#### May 28, 2025 Climate Action Collaborative Learning Team Gathering 3

9. The final Climate Action Collaborative Learning Team meeting will take place on Wednesday, May 28th from 12:00–4:00 p.m. at the BZERC Conference Room, beginning with a provided lunch. The afternoon will include reflection, celebration of the year's Climate Action Planning, review of the SOSD Climate and Sustainability School Survey results, and planning for the Climate Action Plan's future.



We are human. We are earth, air, and water.

Our souls and beings are rooted in the same soil as our trees and animals. Our systems and lives are direct reflections of the state of our environment because we are all a part of this large ecosystem we call earth. I'd like to deconstruct this out of touch idea that we are separate from our climate.

> My why is the trees and the rivers, the flowers and the deer. My why is the connections we share with each other. My why is you and I and the opportunity we have to change.

> > -Lily K. Grade 11, Seven Oaks MET School

#### The Future of the Climate Action Plan

Where are we now? Where do we want to be? How are we going to get there?

Next Steps: Climate Action Collaborative Learning Team and Democratic Engagement

- Share the Climate Action Plan with the SOSD School Board: Present key information from the plan, successes to date, and provide a pathway of possibilities for implementation to secure ongoing support and alignment with divisional priorities.
- Climate Action Collaborative Learning Team: Continue gathering of the team as a space for educators and school leaders to continue this important dialogue and share practices, co-develop initiatives, while moving towards implementation of the Climate Action Plan.

#### Democratic Engagement: Future Data Collection Possibilities

#### • Greenhouse Gas (GHG) Inventory:

Conduct a division-wide GHG audit to identify high-impact areas for emissions reduction and climate equity. For example, use this data to inform decisions around air conditioning access during heat domes.

**Financial Impact Assessment**: Evaluate the long-term costs and benefits of transitioning infrastructure (e.g., HVAC upgrades, renewable energy integration, electric buses) to ensure climate actions are both fiscally responsible and environmentally sound.

#### • Student Survey:

Develop a student-centered survey tool to gather input on climate action priorities, educational experiences, and ideas for change from K–12 students across the division.

#### Community Engagement Survey:

Create a broader engagement tool to involve caregivers, families, and local partners, ensuring that the plan reflects community values and strengthens accountability.

#### **Future Climate Action Possibilities**

Climate Action Forum – Fall 2025

Host a divisional forum for students, educators, families, and community partners to share projects, inspire action, and co-create next steps. Consider forming a planning committee with student, staff, and community representation.

#### School-Based Professional Development – 2025–2026

Each school in SOSD will receive \$3,000 to design and implement climate change education professional development that reflects their school community. Schools are encouraged to focus on interdisciplinary, land-based, place-based, and outdoor learning approaches that reconnect children to the Earth, with an emphasis on learning through an action-orientation.



We hope this Climate Action Plan serves as a living document that inspires collaborative community actions for climate justice, equity, Truth and Reconciliation, and a more beautiful world. Rooted in an ethics of care, guided by hope, and inspired by our shared commitment to 'Growing the Good' in Seven Oaks School Division.

