

DATE: June 12, 2012
TO: Board of Trustees
FROM: Edgar Schmidt, Superintendent of Schools
SUBJECT: Initiatives re Environment (Trustee Request #174)
ORIGINATOR: Brian Smith, Executive Director, Finance and Infrastructure
RESOURCE STAFF: Maegan Lukian, John Nicoll, Larry Schwenneker
REFERENCE: February 28, 2012 Board Meeting (Trustee MacKenzie)

ISSUE

The following information was requested:

In light of Board Policy FO.BP – Environment, and the inspiring student lead initiatives for environmental sustainability taking place across the district, what initiatives could be implemented at a district-wide level over the next 3, 5 & 10 years to effectively reduce our District's impact on the environment?

BACKGROUND

This report will outline some of the initiatives that are being considered over the next 10 years to reduce the District's impact on the environment and raise awareness of environmental sustainability goals that can be reached.

Over the first 3-5 years:

- Waste separation - it will be important to streamline proper separation of waste from recyclables, in the form of separate waste containment, for every school in the District. This will involve all schools and facilities having identical and proper waste segregation receptacles that are clearly marked and placed in multiple locations within buildings to allow for ease of use by teachers, students and facilities/maintenance staff.
- Anti-idling Bylaw - the District is working with the City of Edmonton and area schools with the new anti-idling Bylaw. The District will assist schools in effectively communicating the new bylaw with parents and students.
- Water conservation messaging project - the District also is working in conjunction with EPCOR on a water conservation messaging project. Through data analysis, EPCOR has identified two areas in the district and 10 schools specifically, with higher than average water consumption rates. The EPCOR marketing team has developed a presentation and literature to be distributed through those selected schools with the goal to raise awareness and reduce the habits that lead to excess water consumption.
- Environmental Symposium - to create ongoing environmental educational events such as the Youth Environmental Stewardship Conference, held in 2010 & 2011 in Edmonton Public Schools and organized through EnviroMatters with various provincial collaboration partners. The attendees include students and speakers from around the province. The goal is to have the symposium occur on an annual basis, directly benefitting both students and staff.

- Grants & funding - current grants that are available to district schools will be researched and lists of all available funding will be made accessible across the District.
- Diversion of construction materials - programs available through the current waste service provider will allow the District to increase the diversion rate of construction debris from the landfills to approved recyclers with accredited diversion programs.
- Current information – the District will stay up to date on current environmental initiatives and regulations.
- Initiatives database - an ongoing database is being developed which outlines the existing environmental initiatives being implemented in schools. This database will be available on the EnviroMatters website, to be accessed by both the public and the District.
- Energy Performance Contract - the District is currently involved in an energy retrofitting project involving 27 schools and 3 administration buildings. Once completed, this project will result in guaranteed utility savings, reductions in consumption of natural gas and electricity and an overall reduction in greenhouse gas emissions, effectively lowering the carbon footprint of the district. Demonstration projects involving solar panels and solar walls are included under this contract.

Over the next 10 years:

- Organics recycling - investigate organics recycling across the District. Compostable foods can make up over half of the food waste that enters the landfills each year and segregation of these compostable components could have a significant impact on the amount of waste diverted from the landfill.

CURRENT SITUATION

Waste reduction & recycling programs - over 90% of the schools in the District segregate waste and have both a recycle bin and a general waste bin. The existing contract was modified to adjust the cost of recycling services to almost half that of waste disposal, in an effort to encourage schools to take advantage of the many benefits of segregation and recycling.

District Standards - high environmental standards are maintained through the use of low VOC paints, green cleaning products and by following LEED silver criteria, such as reflective roofing and efficient windows, for all new and ASAP schools in the District.

Energy initiatives - utility consumption is being reduced by modernizing old boilers, energy efficient light retrofitting, heat recovery systems, occupancy light sensors and through the use of utility monitors.

Organics recycling - composting programs have been made available across the District; the program has only been adopted by 3 schools in the district due to the added expense of service, additional containers and more strict segregation requirements. Some new waste disposal and recycling initiatives are currently being reviewed and evaluated in an attempt to increase participation on organics recycling.

Some other initiatives that are currently underway are:

- EnviroMatters website is updated regularly and is a resource for environmental information, to allow for the most current information to be distributed across the District.

- The Lights Out Challenge is held every year on April 22nd in an effort to raise awareness about electricity consumption and to allow schools in the district to participate in Earth Day by reducing their carbon footprint.
- Waste Reduction & Environment Week are two events the District currently participates in, they are organized by Alberta Environment and non-profit organizations.
- Solar Photovoltaic Projects have been designed and implemented in two district schools, Queen Elizabeth and Riverdale School and The Bennett Centre and Amiskwaciy Academy are currently being considered.
- Capital City Clean-up is an ongoing program organized by the City of Edmonton which allows area schools to participate in a variety of events including Schoolyard Clean-up.
- Key partnerships with government agencies and outside organizations are continually growing; this involvement keeps the district updated with current environmental initiatives and allow for important networking opportunities.
- Recognition and nomination of individuals, groups, or organizations that have facilitated the implementation and success of environmental initiatives in area schools, such as the Emerald Awards.

KEY POINTS

- District working to reach 100% participation in all current recycling/diversion programs.
- Ensuring that all schools are participating with proper waste separation will increase savings by taking advantage of lower rates for recycling services under the current contract, maximizing bin utilization and reducing the amount of pick-up services required on the solid waste bins.
- Over the next 1-3 years, the goal is to make the Youth Environmental Stewardship Conference an annual event and emphasis is to be placed on developing similar environmental seminars, tutorials and workshops designed to educate and create awareness.
- Organics recycling in all schools to become a priority and be implemented across the district with a goal of 100% participation.
- Alternative diversion programs and containment options will be researched and reviewed in hopes of streamlining current systems and eliminating some of the issues associated with regular collection services.
- The District considers energy efficiency when opportunities arise.

ATTACHMENTS & APPENDICES

Attachment I: 2011 Youth Environmental Stewardship (YES) Alberta Conference & Schedule

Attachment II: 2010 Environmental Symposium schedule

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Youth Environmental Stewardship (YES) Alberta Conference – Project Proposal

Project Description and Need

The Calgary Board of Education, Edmonton Public Schools, and the City of Red Deer are collaborating on a conference, planned for April 29, 2011, that aims to bring together high school students and their teachers to share, learn, and plan actions to improve the environment.

High schools use a great deal of resources over the course of a year and there are many initiatives that the students can become involved in to promote conservation and increase environmental literacy. Student leaders can become role models in advancing environmental literacy in their school and community. Once students start down this path of leadership and action, they would like the opportunity to share, learn and celebrate with other student leaders in the province to improve the efficacy of their work.

The Goals of the conference will be to:

1. Bring students together from across the province to discuss common local environmental issues and actions related to their schools and communities.
2. Increase student led action on local environmental issues in their communities
3. Develop greater student leadership capacity
4. Share government, corporate and commercial sponsorships, contests, supports and resources.
5. Provide information on post-secondary environmental related fields of study, scholarships, and network opportunities

Through the sharing process offered by this conference, students leaders can go on to create significant environmental changes in their school communities and their communities at large, as they build their capacity to become leaders.

Proposed Conference Schedule

9:30-9:45 Students from out of town arrive; Red Deer students will greet all other students and hand out any conference materials (name tags, notebooks, agenda, etc)

9:45-10:15 Welcome – Red Deer College, City of Red Deer
Introduction to the day (conference Organizers)

10:15-11:15 Focused conversation in small groups (10-15 students)

Focused conversation to include:

- Sharing of current projects actions; top 10 things we're proud of at our school
- Discussion on questions like



- a) What does and environmentally friendly school look like?
- b) What does your school have now, what does it need to have?
- c) Other questions identified during needs assessment (potential conference attendees are being surveyed on what they would like to see as components of the conference)

11:15-12:00 Debrief focused conversation, keynote speaker

12:00-1 Lunch, Display walk: Poster Presentation from participating schools on environmental action projects, resource tables with information from participating organizations

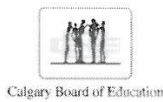
1:00-3:00 4 rotating sessions/workshops on topics identified in needs assessment. Students self-select from list of ~10 workshops.

Example topics/possible workshop hosts:

Emerald foundation/awards
Youth Environmental Leadership association (YELA)
Recycling Council of Alberta (RCA)
UofC Office of Sustainability
Alberta Council for Environmental Education (ACEE)
UofA Faculty of Agriculture, Life & Environmental Sciences
TD Friends of the Environment Foundation
Alberta EcoTrust

Project Outcomes

- Increased staff and student operational environmental literacy
- A network of student environmental leaders throughout the province that support each other through their environmental action projects
- A template and foundation for future conferences (the hope is that this will become an annual conference)
- An opportunity to share and celebrate environmental action already being done
- Students better able to match their environmental interests with post secondary offerings.



Conference Schedule of Events

Morning

- | | |
|-------------|--|
| 9:30 | Registration |
| 9:45-10:15 | Welcome and Introductions |
| 10:15-11:15 | Session 1: Focused Conversation
Sharing current initiatives, successes and challenges |
| 11:15-12:00 | Keynote Speaker: Mike Kozlowski
Inspiring ACTION |

12-1 LUNCH

Walk around and take in poster presentations from participating schools and check out the resource tables from participating organizations.

Afternoon

1:00-2:45

Session 2: Capacity Building Workshops
What do you need to make change happen?

Rotation A

1:00-1:25

Students will choose to attend 3 sessions out of the following list. Students will have 25min in each session with a 10min rotation.

Rotation B

1:35-2:00

Rotation C

2:10-2:35

Subject/Theme	Facilitator
Post Secondary Opportunities: Making the transition from action at the secondary level to the post secondary level	UofA Agriculture and Environmental Sustainability
Active and Safe Routes to Schools using Active Transportation	SHAPE Alberta
Alternative Transportation	Two Wheel View
Food Waste as a resource: Vermicomposting	Kerry Wood Nature Centre
Reduce, Reuse, Recycle: Applying the 3Rs Hierarchy to initiatives	Recycling Council of Alberta
Reducing Energy Consumption and Energy Generation Alternatives	ENMAX
<i>Renewable Energy: How does it work?</i>	NAIT - Tentative
Creating a winning action plan for funding success	TD Friends of the Environment Foundation
Creating an Environmental Action Plan	City of Red Deer, Environmental Master Plan
Encouraging and Recognizing Environmental Learning and Action in Schools	CBE EcoSites
Mobilizing Staff and Students for Environmental Action	Alberta Council for Environmental Education
Red Deer College Sustainable Building and Initiatives – TOUR	Red Deer College
	Note Tour will only be available for first 25min session (1:00-1:25)

2:45-3:15

Session 3: What's next?
Integrating the day's learning

3:15-3:30

Program close and departure

Student Environmental Symposium

Students for Sustainable Schools



Date: Friday, January 29, 2010

Location: Centre for Education

Cost: \$10/student

9:00 – 9:30	Registration & School Package Pick-Up
9:30 – 9:45	Welcome & School Introductions/Ice Breakers
9:45 – 10:30	Keynote Speakers: Craig & Layla Baird (http://ourgreenyear.blogspot.com)
10:30 – 11:00	EPSB Environmental Footprint Presentation
11:00 – 11:15	Refreshment break
11:15 – 12:00	School Initiatives Discussion & Round Table
12:00 – 12:45	Lunch (Sponsored by Waste Management Inc)
12:50 – 1:00	Guest Presentation
1:00 – 2:15	Breakout Sessions with community organizations
2:30 – 3:00	Closure

To register students from your school, email student names to consultingservices@epsb.ca

or call 780-429-8050

citing Reference # SES00001-01

Symposium Goals:

1. Students will be motivated and inspired to create environmental differences in their schools.
2. It is an opportunity to share various school and district initiatives.
3. To learn about resources available to student environmental groups in Edmonton Public Schools.

Sponsored by
Edmonton Public Schools' EnviroMatters
and M.E. LaZerte's Student Green Team



Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.

- Margaret Mead