



A better planet begins in the classroom

**PROSPECTUS
DCS BENEFITS AND SERVICES**



A Program of the Saskatchewan Environmental Society





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Destination Conservation Saskatchewan: Benefits and Services

Destination Conservation Saskatchewan (DCS) is a practical, student-driven, activity-based program that brings environmental education alive in our schools. Students, teachers, principals, custodians and parents cooperate with Destination Conservation Saskatchewan in this multi-year program. It is designed to increase sustainability by helping schools conserve resources and protect the environment. DCS helps students and staff save energy, conserve water and reduce waste while at the same time saving money! The education program typically produces 5-10% in savings for school divisions. When coupled with energy retrofits, 20-30% savings can be achieved.

THE DCS PROGRAM HAS FOUR MAIN BENEFITS

- 1. Provides educational support** - DCS provides educational resources and ongoing support to schools. Curriculum connections bring DCS into the classroom from grade 1 through high school. DCS activities promote teamwork and help students develop independent thinking, analyzing and evaluating skills.
- 2. Promotes partnerships** - DCS offers a team approach to conservation. Students, teachers, administrators, parents, custodians, community members and corporate partners work as a team to reach their conservation goals. By involving so many members of the school community, responsibility for success rests with everyone. When program results start to appear, everyone can share in the credit. They have all helped lead the way in creating practical, long-term environmental benefits within their school and community.
- 3. Conserves resources** - By reducing energy use, emissions from burning fossil fuels are reduced. Water conservation not only reduces the use of a valuable renewable resource, but conserves energy needed to clean, pump and heat water. Practicing the 3Rs (reduce, reuse, recycle) conserves the energy and other resources required to produce consumer products and reduces the effect of waste disposal.
- 4. Saves money** - DCS's practical student-based activities typically produce savings of about 5-10%. When this educational program is combined with technical upgrades (see section on Technical Services) in the school, savings of 20-30% can be achieved. Actual utility savings are documented, and DCS recommends that a percentage of savings be returned to the school's Destination Conservation Saskatchewan club or class.

DCS Educational Services

The strength of the DCS Program is in its support services, tools and products. DCS provides the following resources to participating schools:

1. Workshops

DCS facilitators work with teachers, students, school staff, and parents several times a year in workshops that provide the training for implementing DCS in the school. Participants receive training on energy conservation technology and lifestyle campaigns, with more in-depth training offered as schools become more involved. Teachers also participate in professional development workshops that help them integrate environmental education with their curriculum, motivate students and use resources effectively.

2. Manuals

DCS provides three manuals to schools. The *School Conservation Team Manual* helps school staff set-up the program in their schools and encourage participation by students and other staff. The *Program Manual* is the main tool for operating DCS in the school. It includes student audits, campaign information and monitoring activities. The *Teacher's Resource Manual* compiles information on curricula fits and classroom activities. Curricula fits, connecting the DCS activities to the Saskatchewan curricula, are also included in this manual

3. Internet Resources

The website of the Saskatchewan Environmental Society at www.environmentalsociety.ca provides information on locally available educational resources, SES's resource library and information on current environmental issues. The SES website includes a DCS section.

4. DCS Display

A large, eye-catching DCS Display is provided to schools. The School Conservation Team and Conservation Club can use the display to communicate their DCS activities to students, staff, parents and school visitors. The display becomes a personalized demonstration of the school's commitment to the environment and economy.

5. Home Guides

These resources help DCS teachers work with their students to create home-based conservation activities. The set includes Home Guides for Energy, Water, Solid Waste, and Household Hazardous Waste. Each of the Guides provides in-depth background and campaign information which help students to work with their families to create further environmental savings.

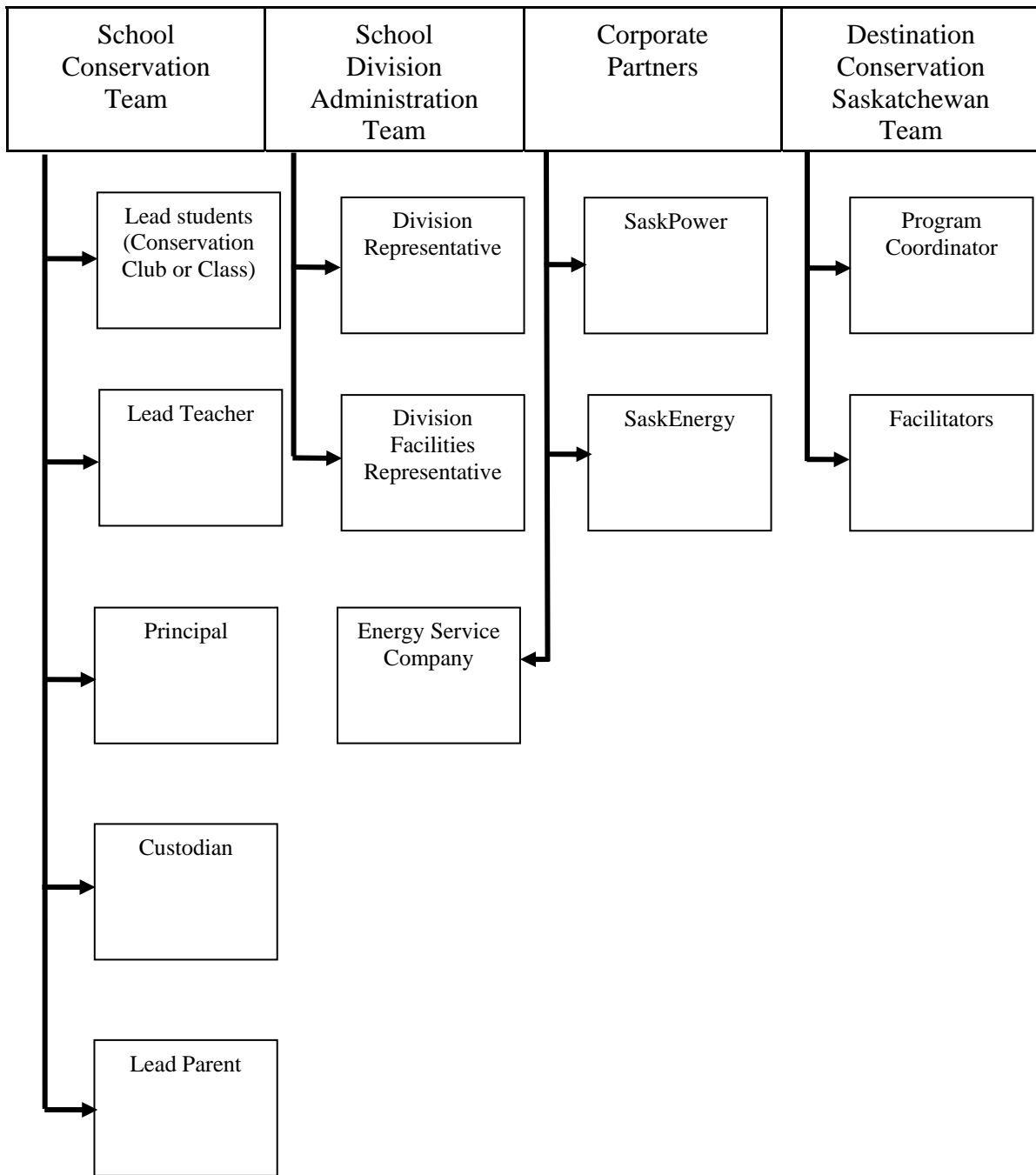
6. Take Home Energy Conservation Items

Take-home items are made available to students in a designated class or club in each year of the three-year program. The items may include household devices to save water, electricity, and natural gas, and create awareness of conservation issues in the home.

7. Annual Celebration

Each spring, events are held to celebrate the success of the program in participating school divisions. These events are located at parks, schools or outdoor education facilities and feature students' presentations, educational activities, and entertainment. These events provide students with an opportunity to show both adult and youth attendees that positive, tangible changes for protection of the environment are possible and practical.

DCS PARTNERS



DCS Workshops

	Year One	Year Two	Year Three
September	Initial Workshop	Retraining Workshop	Advanced Lifestyle Workshop
October			
November	Technical Workshop		
December			
January	Lifestyle Campaign Workshop	Professional Development Workshop	EcoFootprint Workshop
February			
March			
April			
May	Year End Celebration	Year End Celebration	Year End Celebration
June			

Technical Services

While the Educational Services of Destination Conservation Saskatchewan can, on their own, provide schools with valuable educational resources and processes, the full impact of the program is apparent when education is integrated with technical services.

These services can be delivered in a number of ways. The Destination Conservation Saskatchewan Coordinator can help you decide which approach(es) are the most appropriate for your school division.

SASKPOWER ENERGY SOLUTIONS

Your school division may choose to retrofit its facilities through the SaskPower Energy Solutions program. SaskPower Energy Solutions' Energy Performance Contracting is a unique program that allows you to implement facility improvements, reduce energy costs, improve comfort conditions, and contribute to educational and environmental objectives - all within your existing budget. The program provides comprehensive energy management services including energy audits, design, engineering, technology installation, financial options, savings guarantee, and training.

OTHER ENERGY SERVICES CONTRACTOR

Your school division may choose to retrofit its schools through another Energy Services Contractor (ESCO). In that case the ESCO would provide the energy management services.

THE SAVINGS RE-INVESTMENT APPROACH

In this case your school division agrees to a three-year program which moves from low-tech, low-cost energy conservation measures in the first year to costlier, more technological measures by the third year of the program. In this approach, savings achieved in one year of the program help to finance retrofits in the following year. The school division pays for the energy audit, the cost of which is typically recouped from energy savings the first year of the program.

BUILDING OPERATOR TRAINING PROGRAM

Destination Conservation Saskatchewan offers training to custodial and division facilities staff. This training covers energy conservation principles, building management for energy conservation and new technologies and retrofits.

Building Operator Training Program

Destination Conservation Saskatchewan can also provide a series of technical training sessions for custodians, building operators, and maintenance staff. This training introduces personnel to energy conservation principles, new technologies and retrofits that are being adopted by the schools.

Technical training sessions are very important as a way of making technical staff comfortable with the new technologies and operational changes that may take place in their facilities. It offers them an opportunity to understand the changes, to ask questions about the technologies and their impact on how they perform their job, and to become an active member of the DCS program.

The modules can be tailored to the specific needs of the group, adding or recombining topics as needed.

The training sessions can also serve as an opportunity for technical staff in a district to solve problems that may be specific to their facilities, and to discover the best ways for DCS technical changes to take place in their district.

LIGHTING MODULE TOPICS

- Advantages and benefits of energy efficient lighting
- Discussion of proposed retrofit and how it will affect building occupants (where applicable)
- Fluorescent lighting issues - ballasts, reflectors, mixing lamp types
- Other lamp and fixture types - incandescent, quartz halogen, CF, HID, full spectrum
- Lighting devices - LED exit lights, photocells, time clocks, occupancy sensors
- Energy and power
- Common mythology about light switching
- Other energy savings tips
- Maintenance issues - PCB ballasts, hazardous waste, cleaning, safety, replacement

ELECTRICAL EQUIPMENT MODULE TOPICS

- Advantages and benefits of electrical equipment efficiency
- Energy savings measures for electrical equipment
- Office equipment - computers, printers, photocopiers
- Refrigerators and freezers
- Electric kilns and load scheduling
- Electrical equipment with digital panels
- Vending machines - refrigerated and non-refrigerated
- Car plug controls
- Electric heaters
- Drinking water coolers
- Energuide ratings

HVAC MODULE TOPICS

- Advantages and benefits of energy efficient HVAC systems
- Expectations of comfort
- Thermostats - use, mythology, portables
- Ventilation systems - fans, free cooling, night purge, HOA switches
- System overrides, time clocks
- Building automation systems
- Discussion of proposed retrofit and how it will affect building occupants (where applicable)
- Description of existing HVAC system
- Indoor air quality - influences, checklist
- Energy savings tips
- Maintenance issues - boiler temperature and pressure records, reporting

WASTE MODULE TOPICS

- Current waste practices and opportunities for change
- Recycling and waste audits
- Types of 3R practices available for your facility
- Developing and implementing a waste management plan focussing on minimization

WATER CONSERVATION MODULE TOPICS

- Advantages and benefits of efficient water use
- Water metering and billing
- Discussion of proposed retrofit and how it will affect building occupants (where applicable)
- Showers, toilets, faucets and other fixtures
- Common mythologies about water conserving fixtures
- Water saving control devices and strategies
- Domestic hot water systems
- Fuel conversion for water heaters
- Water-cooled equipment
- Irrigation and landscaping - sprinklers, maintenance, landscaping alternatives
- Water savings tips