BATHURST SUSTAINABLE DEVELOPMENT

January 2011

www.bathurstsustainabledevelopment.com

PROFILE

The concern for quality of life and water quality in our watershed led to the establishment of Bathurst Sustainable Development in 1998. The overall objective was to set up a long-term mechanism for the communication and action among government, business and the community, to encourage residents to take a more active part in mitigating the impact of watershed effluent in the Nepisiguit Drainage Basin and addressing Climate Change. Bathurst Sustainable Development is a non-profit organization. www.bathurstsustainabledevelopment.com

The organization works to facilitate local community, business and government interactions for the long-term mutual betterment of environmental quality, economic health and social well-being.

MISSION STATEMENT: It is the mandate of this organization to facilitate interactions between members of the community, business, industry, municipal governments, representatives from provincial government departments and all others interested in the betterment of the environmental quality, economic health and social well-being of our community.

UNITED NATIONS DEFINITION OF SUSTAINABLE DEVELOPMENT... to be able to use your natural resources in such a way at the present time so that you will have something for future generations....

SUSTAINABLE COMMUNITIES DEFINITION ... communities who use their natural resources in such a way at the present time that they maintain an acceptable level of social, economic and ecological health for future generations....

Sustainable Communities are those which add value to natural resources and reap the rewards of this approach in terms of jobs and prosperity that continue for future generations. A sustainable community empowers itself to achieve a common vision for the future, and effectively responds to change through community based integrated decision making, increased resilience and economic self reliance, and sound environmental stewardship. Sustainable communities have the collective capacity to "get things done."

Natural Resources Canada

PROJECTS

Sustainable Communities Initiative Project, 2000-2003: The Sustainable Communities Initiative (SCI) sponsored by NRCan, a Geo Connections component, and partners with Bathurst Sustainable Development (BSD) and supports its efforts to create and implement a greenhouse gas emissions reduction plan for the City of Bathurst as part of their participation in the Partners for Climate Change Program. BSD is embarking on a 10-year, three-phase partnership with the City of Bathurst, with the goal of reducing the emissions produced by the city by 20% below the 1990 levels before the year 2010. The SCI project will constitute Phase 1. BSD will be trained in and acquire GIS capacity in the form of Arc View.

Reference: City of Bathurst, Federation of Canadian Municipalities (FCM), ICLEI, and the Sustainable Communities Initiative. Natural Resources Canada.

Update: 2003- we are now entering the third and final year of this project. We have submitted the Local Plan of Action to the City Council for GHG Emissions Reduction. We have moved into the implementation Phase of this initiative by successfully obtaining funding for the City from Transport Canada and FCM to conduct a feasibility study to initiate an Urban Transit Bus Service within the City. Bathurst Sustainable Development will conduct all of the Public Consultations, prepared the digital maps of the proposed bus route and establish the "Net Environmental Impact in Absolute Terms" from the implementation of the bus service, in relation to the reduction of City wide greenhouse gas emissions.

The Kyoto Green Plan (2000): A greenhouse gas inventory has been completed and recommendations for a community-wide strategy have been presented to the City of Bathurst called The Cities for Climate Change Program- Local Plan of action for Greenhouse gas Reduction. It is available to read on our web site at www.bathurstsustainabledevelopment.com The City of Bathurst has completed Milestones 1, 2, 3, and are now in Milestone #4 of the Partners for Climate Change Program. Contact: Brenda Kelley, BSD

Reference: Partners for Climate Change Protection (PCP), International Council for Local Environmental Initiatives (ICLEI), NB Power.

Measurable Impact: In April of 2000, the City of Bathurst and Bathurst Sustainable Development jointly signed an international resolution making them the 81st Canadian Municipality to join the Partners for Climate Change Protection. The resolution states that we acknowledge climate change and global warming as a threat to our people, that we agree to establish the Greenhouse House Gas levels that our city produces, and that we develop a plan of reduction that will equal 20% below 1990 levels by 2020. Bathurst Sustainable Development is an associate member of the Federation of Canadian Municipalities and the Canadian Urban Transit Association.

2009 Update- The Kyoto Committee: The City and BSD have been working together on meeting the Kyoto Targets for Greenhouse Gas Emissions Reduction targets as set by the Kyoto Protocol and the Partner's for Climate Change Protection Program (**PCP**) since the year 2000. A Local Plan of Action for reducing our GHG emissions was presented and we are working towards completing many of them. The plan is posted on the BSD website.

In 2000, BSD voluntarily, with the assistance of the International Council for Local Environmental Initiatives (ICLEI), Natural Resources Canada (NRCan) and the Federation of Canadian Municipalities (FCM) established

the amount of GHG emissions produced by all sectors in our City including residential, commercial, waste, streetlights, Municipal operations and transportation for both the 1995 year and the year 2000. The City and BSD are now collecting the data for the 2006 year for City operations, streetlights, waste, NB Power will be providing us with the residential GHG emissions, and we estimate transportation based on natural averages. This data is then sent on to ICLEI and FCM and forms part of Canada's total GHG emissions and hopefully reports a reduction in GHG emissions if we have reduced any in Bathurst.

Urban Transportation Project: (2003-2004) Funded by the Federation of Canadian Municipalities and a national transportation agency: Bathurst Sustainable Development has written and successfully received funding to conduct in partnership with the City of Bathurst a feasibility study and public consultations to prepare the City for the implementation of an Urban Transit Bus service! We have now completed 505 of the study and are actively writing proposals to secure funding for the start up of this service.

Reference: City of Bathurst, Transport Canada,

The Urban Transit Test Project- (2005-2006) - BSD wrote all three funding applications, a three year business plan, all budget cash flows for three years, and a Pollution Control Policy for this project on behalf of the City of Bathurst. BSD is being contracted to manage both the Project Activities and the Transit System during the project. Activities also include writing a How to Guide for a Small Urban Transit System.

Reference: City of Bathurst, FCM, Transport Canada and the National Homelessness Initiative.

The Regional Fleet Assessment Project- 2006-2007: BSD is conducting a feasibility study on the implementation of a daily transit bus service that would serve the region from Bathurst to Belledune. The final report will be released in April 2007.

Reference: City of Bathurst and Transport Canada

STAP: 2007-2008- A Sustainable Transportation Action Plan for the City of Bathurst: BSD will work with the City and conduct public consultations to identify, study and recommend ways that the City of Bathurst can ensure that citizens living in Bathurst have access to and can increase their participation in active and sustainable transportation options (biking, walking, skateboarding, rollerblading and using public transit for example) as a means of commuting to and from work, errands and appointments, for recreational purposes, so as to reduce harmful greenhouse gas emissions from single occupancy vehicle use, to increase physical activity and wellness, reduce transportation costs, provide affordable access to employment and increase quality of life in our City. Many of the initiatives will be adopted into policies, by-laws and or as part of the City Transportation Master Plan.

Reference: City of Bathurst and Environment Canada

The Solar Mapping Project- 2003-2004 Sponsored by Environment Canada, Bathurst Sustainable Development will conduct a curb side assessment to identify which of the residential and commercial properties in the City of Bathurst are currently suitable to the instillation of solar thermal and solar voltaic panels to help to divert some of their dependency on fossil fuels, help reduce their greenhouse gas emissions and assist them to begin to convert to renewable energy. The properties and information will be placed into a GIS layer to be incorporated into the Cities mapping and the mapping of Bathurst Sustainable development. Prospective property purchasers and current owners will be able to check with BSD or the City to identify properties which are suitable for solar panels.

Reference: City of Bathurst, FCM Transport Canada and Environment Canada

The Solar City Project Project-2005-2006 Sponsored by Environment Canada, and Natural Resources Canada through their Renewable Energy Deployment Initiative (REDI), Bathurst Sustainable Development will make available Solar Grants for residential homeowners in the Provinces of New Brunswick and P.E.I. to install either a solar thermal air heating system or a solar hot water heating system into their home to help to divert some of their dependency on fossil fuels, help reduce their greenhouse gas emissions and assist them to begin to convert to renewable energy. BSD will also conduct Solar Home tours in the area. BSD is officially registered with the Federal Government of Canada as Energy Innovators.

Reference: Environment Canada

The One-Tonne Challenge: 2004-2006 Bathurst Sustainable Development has been selected by the Government of Canada, Climate Change Bureau of Environment Canada, to be one of the 41 community organizations and communities to lead a "One-Tonne Challenge-Community Challenge" (OTC) in Canada! Activities will focus on ways that individuals can improve energy efficiency in their housing and sustainable transportation. The One-Tonne Challenge is a Government of Canada initiative that calls on each individual Canadian to take action on climate change and clean air by reducing their annual greenhouse gas emissions (GHG's) by one tonne. BSD will open an Environmental Resource Center at the Bathurst Farmer's Market were a live solar showcase demonstration will be developed along with several energy efficiency demonstrations. Citizens can register for the OTC at the Market Center or by visiting the BSD web site. Presentations will be made to local schools and groups. An Earth Day Celebration will be combined with a recognition night for citizens leading the OTC Challenge. The Climate Change Bus will visit the City during the week of Earth Day.

Reference: Environment Canada, Climate Change Bureau

Earth Film Festival and Lecture Series: 2005- onward. Monthly evening showings of Earth Sciences films and National Film Board documentaries about current global and local environmental issues along with invited special guest lectures will be conducted month. Publicity is done to inform citizens of the location of the event. The evenings are always free of charge to the public and are sponsored through our various programs. Popcorn is served.

Abandoned and Closed Mines Committee (2002). The committee will assess the environmental impact of contamination leaching from local sites on drinking water supplies. Assessment of facilities which are abandoned closed, inactive or closing. Members: *DNRE*, *DELG*, *Mines Branch*, *NSA*, *Citizens*, *DFO*. Contact: *Brenda Kelley*

Fresh Water for Atlantic Canada - Emerging issues for the 21st Century (2002). This conference explored the link between water quality and human health and the impact of climate change on water quality and quantity. This conference targeted managers of drinking water supply, consulting engineers, government, environmentalists, conservation groups, citizens, regulators, business, industry, researchers, students, First Nations, and other concerned with drinking water and fresh water resources. 86 participants attended. Contact: *Brenda Kelley*

Co-Sponsors: Canadian Climate Change Adaptation and Research Network., NB Department of Environment and Local Government, Environment Canada, Noranda, Eastern Canada Water & Soil Conservation Center, Smurfit Stone and the NB Department of Environment and Local Government.

The Rain Barrel Project: (2002, 2003). 618 rain barrels have been constructed and distributed to citizens for the simple price of attending a "Rain Water Harvesting- Water Conservation Presentation".

Reference: NB Environmental Trust Fund

The Traveling Enviro Club Project: (2003-2004) Sponsored by Environment Canada, Atlantic Region. It is hoped that this project will encourage schools to engage in the development of Enviro Clubs and will show the importance of exposing the children to current environmental information and issues. It will also increase the environmental knowledge of school age children regarding the ecological sensitivity of watersheds, increase their knowledge of species at risk in our region and provide them with current information on climate change. It is also our hope to become a "friend" to the schools to act as a local resource for information and environmental leadership. As well, it is the objective of this project to encourage each school to organize an activity for Earth Day as part of the Enviro Club record of activities for future generations. Publicity of the Enviro Clubs activities will provide incentives and leadership for the general population to also become more actively engaged in environmental issues and protection of natural resources. On all of our printed materials and displays, reference will be made to recognize the funding source for this project- Environment Canada. We appreciate their mentorship.

Reference: Environment Canada

Septic Tank Conversion Project: (2002, 2003, 2006, 2007) 11- 16 grants per year of \$2,500- \$2700 are given to low-income homeowners who have been identified by the Department of Health and Wellness as being in need of a new of upgraded sewage treatment system for their home. This project has been repeated each year since 1997.

Reference: NB Environmental Trust Fund

Water Conservation Program: (2007, 2008) Working with the City of Bathurst, BSD will outreach to the public through the development of a door knob information flyer on the importance of participating in water conservation which will be distributed to every home and business in the City and will make presentation to local groups and schools on water conservation.

Reference: NB Environmental Trust Fund

Environmental Resource Center: (2004-2011) BSD operates an Environmental Resource Center at the Bathurst City Farmer's Market on Saturday mornings where they host a Solar Showcase of live working solar systems, provide info to citizens about the One-Tonne Challenge, Energy Efficiency, Renewable Energy, Conservation measures, Water Quality protection, Greenhouse Gas emissions mitigation, and Sustainable Living ideas.

Reference: NB Environmental Trust Fund, Environment Canada, Xstrata Zinc Inc.

Climate Change Action Center: (2007-2010): BSD has opened a Climate Change Action Center, on Main Street, Bathurst. The center is open Tuesday, Wednesday and Thursday from 9am-2 pm, plus every Saturday morning we are over at the City Farmer's Market where we have our Environmental Resource Center and throughout the year many different presentations, information session, workshop, film or PP presentation is offered at the Action Center. The topics range from energy efficiency, home renovations, protecting wetlands, water conservation, green procurement, watershed studies, endangered Species, Sustainable living ideas, sustainable conservation design, reducing your ecological and carbon footprint,

composting, recycling, seed saving, gardening, etc... Some events are also being scheduled for the 2010 year at our Community Garden which is in Victoria Park on Victoria Avenue in Bathurst.

Reference: NB Environmental Trust Fund

Bathurst Bike Rack Program: (2008-2010): With the kind assistance of the City of Bathurst, C-Media Global and The NB Active Communities Grant Program we have established the Bathurst Bike Rack program which is a series of high quality universal bike rack that have been placed throughout the City. Racks have ad space on the top in which BSD has placed public educational information on the topics of climate change, active living and sustainable transportation. The City of Bathurst has now modified the Signage by-law to also allow commercial ads to also be placed on the racks.

Reference: City of Bathurst and the NB Department of Health and Wellness.

Community Gardens Program: (2007-2010): BSD, in partnership with the City of Bathurst, Victoria Park Enhancement Committee and TD Friends of the Environment, we established a Community Garden in Victoria Park, Bathurst. The purpose of the garden is to help citizens take a more active role in preserving biodiversity in urban centers, learn about how to grow their own sources of local food and to participate in active living. In the 2010 season, we will be holding several workshops and information session at the Community Garden on various topics including the International Year of Biodiversity which is 2010.

Reference: City of Bathurst, Xstrata TD Friends of the Environment

Rain Water Collector for Community Garden: (2008-2010): With the kind assistance of the City of Bathurst and the Royal Bank Blue Water Program, BSD has constructed a Rain Water Collection system to provide rain water to the Community Garden in Victoria Park, Bathurst.

Reference: City of Bathurst and the RBC Blue Water Project

Community Energy Efficiency Campaign: (2008-2009) This year we are conducting a Community Energy Efficiency Campaign with the partnership of Eco Action, Province of NB, Efficiency NB, NB Power, Nepisiguit Chaleur Solid Waste Commission, Aliant and the City of Bathurst as our partners.

Reference: NB Environmental Trust Fund_and Environment Canada

The Children's Garden and Outdoor Biodiversity Project (2009-2010): BSD established an outdoor biodiversity center and children's garden at two local schools to increase habitat and green spaces, to increase awareness about climate change and the environment, to reduce food miles and to encourage schools to establish outdoor classrooms and increase biodiversity at the schools. Learning modules were also taught to the students. They grew the food necessary to have two Salsa and Vegetable Sampling Parties for 465 children and teachers at the two schools.

Reference: Environnent Canada - Atlantic Region / Environnement Canada - région

Composting Demonstration Site: (2008-2009): A composting demonstration site at the Community Garden was established in 2009.

Education and Stewardship program on the Maritime Ringlet (2008-2009): With the support of the Habitat Stewardship Program BSD will publish an information booklet on the maritime Ringlet Butterfly

to provide Information on the impact of human activities on salt marshes, habitat, species at risk, other vulnerable species and on the Endangered Species Maritime Ringlet Butterfly and conduct a survey and meetings with landowners living around the species habitats on eco friendly and best management landuse management and insect control practices that will help in the stewardship of the survival and recovery of this species.

Reference: Government of Canada Habitat Stewardship Program for Species at Risk.

RBC Bluewater Watershed Awareness and Riparian Zone Inventory Project: (2009-2011):

BSD in partnership with the City of Bathurst were selected as one of the 31 organizations globally to receive funding for their project submission to the RBC Blue Water Program. Working closely with the City of Bathurst, NBDOE, NBDNR, NWMC and other stakeholders BSD will lead a riparian study in the Middle River and carter's Brook watersheds which are the sources of potable drinking water for the City of Bathurst and the Town of Beresford. BSD will also conduct a community outreach Water Conservation campaign in the form of publishing a booklet entitled: get to know Your Watershed, conduct a Water Audit with residential home households and businesses in the Bathurst and Beresford Areas.

Reference: City of Bathurst and the RBC Blue Water Project

Biodiversity and Climate Change Project: (2010-2011): NB ETF and Eco Action

Reference: NB Environmental Trust Fund and Environment Canada

Environmental Leadership Program: (2010-2011): Environment Canada

Reference: Environnent Canada - Atlantic Region / Environnement Canada - région

Eco Fair 2010- write up to follow.

SELECTED RESOURCES/ DOCUMENTS PUBLISHED

(Most documents are on our web site or posted in our reading room on the web site.)

The Nepisiguit Watershed Newsletter. See our website www.bathurstsustainabledevelopment.com

Household Hazardous Waste Fact Sheet (1997) Copies still available.

Sustainable Snowmobiling: Flyer printed and distributed.

Ice Fishing and the Environment: Flyer printed and distributed

Public Policy Workshop, 2002: Sponsored by Environment Canada

Historical Files, Research and Data from Government Project form 1995-2000

GIS Digital Maps of Northern NB Region- GIS- Geographical Information System (digital mapping) Maps available- Daley Point Reserve, Nepisiguit Drainage Basin, Nigadoo Drainage Basin, Restigouche Drainage Basin, Middle River Watershed, Urban Transit Bus Route for the City of Bathurst.

Research Files- Bathurst sustainable Development houses a vast inventory of research information of studies, reports and files previously conducted on the North Eastern area of NB. We also have available a wide variety of materials on a vast number of current environmental issues.

PUBLICATIONS/ STUDIES PUBLISHED OR PRODUCED

Partners for Climate Change Program (PCP)

PCP Milestone 1: GHG Emissions Inventory for the City of Bathurst PCP Milestone 2: Local Plan of Action for Reducing GHG Emissions- City of Bathurst PCP Milestone 3: Implementing the Local Plan of Action- We have an ongoing joint	2000 2001
committee with the City Administrators entitled; The Kyoto Committe	e 2001
GHG Emissions Map for the City of Bathurst	2003
Harvesting Rain Water Flyer	2004
Green Economic Development Association (GREDA) for North-eastern NB	2005
The Business Case for Public Transit	2005
Public Transit: A How to Guide for Public Transit for Small Urban Centers	2006
Solar Map for the City of Bathurst	2006
Carbon Footprint Fact Sheet	2006
Pollution Control Policy for Public Transit in Bathurst	2006
The Regional Fleet Assessment	2007
Transit Tips Flyer	2007
Brief to the NB Self- Sufficiency Task Force	2007
Water Conservation Tips Door Knob Hangers	2007
STAP: Sustainable Transportation Action Plan for the City of Bathurst (We have an ongoing joint committee with City Administrators and BSD entitled: The STAP Committee)	2007
Green Procurement Policy for the City of Bathurst (Adopted)	2007
Anti- Idling Policy for the City of Bathurst (Adopted)	2007
Declaration and Vision for Sustainability for the City of Bathurst Adopted)	2007
Green Plan for the City of Bathurst	2007
Sustaining Local Food Supplies- Food Miles Chart	2007
Draft Pesticide Policy for the City of Bathurst	2007
Sustainable Conservation Design Municipal Toolkit	2009
Composting Fact Sheet	2008
Vert l'avenir: Environmental Documentary for Rogers Television,	2008
13 Episodes- playing now on Rogers French language stations and also broadcast in the province of Quebec.	
Caron Erosion Study Booklet: Life in a Coastal Eco System	2009
Endangered Species: Maritime Ringlet Butterfly Booklet	2009
Get to Know Your Watershed (Middle River and Carter's Brook)	2009
Green Guide: Active and Sustainable Transportation and Green Ideas	
for Festivals and Special Events	2009
Eco Fair 2010- Bathurst, NB August 14, City Farmer's Market parking lot	2010

COMMITTEE WORK/ MEMBERSHIPS

- Member of and selected by stakeholders as the local Coordinator and spokes person of the Caron Study being conducted with the University of Moncton, City of Bathurst, NBDNR and landowners on coastal erosion in the Bayshore Drive are (reference Gilles Martin and Omer Chouinard University of Moncton) 2007-2009
- Member of the Mount Carleton Protected Natural Area Advisory Committee 2005-2009
- ➤ Commission member of the Daly Point Nature Reserve, Bathurst 2005-2009
- ➤ Member of the NBEN Mining Caucus 2007-2009
- ➤ Member of the NB Environmental Assessment Caucus (2008-2009)
- ➤ Delegate for the Canadian Environmental Network (CEN) on the Towards Sustainable Mining COI panel 2004-2009
- ➤ Member of the CEN Mining Caucus 2006-2009
- ➤ Member of the Nepisiquit Watershed Management Committee 2002-2000
- ➤ Chair of the Kyoto Committee with the City of Bathurst 2001-2009
- > Chair of the STAP/ Transportation Committee with the City of Bathurst 2004-2009
- Member of the Atlantic Canada Sustainability Initiative
- ➤ Member of the local Homelessness Advisory Committee, Bathurst 2004-2009
- ➤ Member of the NB Climate Change Hub- 2003-2009

SAMPLE OF SPEAKING ENGAGEMENTS

October 2005: GIN- Greening of Industry Association Conference, Acadia University, NS. Topic of BSD Presentation: "Solutions to Climate Change for Small Urban Centers".

<u>February 2006:</u> Federation of Canadian Municipalities Sustainable Communities Conference, Chateau Laurier, Ottawa. Topic of BSD Presentation: "Funding and Solutions for Sustainable Development in Rural and Small Urban Centers".

<u>February 10, 2006:</u> Dalhousie University School of Law, Halifax, NS. Topic of Presentation: "Social Justice and Environmental Law."

May, 2006: Renewable Energy Conference, Miriamichi, NB, Panel Member.

<u>June, 12, 2006:</u> Sustainable Communities Planning Workshop for Municipalities, Topic of Presentation: The Business Case for Public Transit and Transportation Demand Management Planning, Oromocto, NB.

<u>September 2006</u>: Salt of the Earth Conference, Liverpool, Nova Scotia.

<u>March 2007:</u> Green Communities Canada AGM, Delta Halifax, NS. Topic of Presentation: Fostering a Green Agenda and Climate Change Solutions- Public Transit for Small Municipalities.

May 27, 2007: Sackville, NB: Southern Gulf of St. Lawrence Coalition on Sustainability- Sustainable Communities Workshop. Topic of Presentation: Climate Change Solutions- Public Transit for Small Communities

PARTNERSHIPS/ ASSOCIATIONS

City of Bathurst, Natural Resources Canada, Noranda, Department of Fisheries and Oceans, Bathurst Healthy Communities Network, Department of Health and Wellness, Nepisiguit Salmon Association, Southern Gulf of St. Lawrence Coalition on Sustainability, New Brunswick Environment Network, Department of Environment and Local Government, Mining Watch Canada, Canadian Environmental Network, Federation of Canadian Municipalities, International Council for Local Environmental Initiatives, Local Municipalities, Transport Canada, the National Homelessness Initiative, local citizens, businesses, and organizations, Climate Action Network, Southern Gulf of St. Lawrence Coalition on Sustainability, Green Communities Canada, Canadian Environmental Network, NB Environmental Network, Daly Point Reserve Advisory Committee, Mount Carleton Natural Protected Area Advisory Committee, Atlantic Canada, Sustainability Initiative.

BSD is the current selected delegate of the Canadian Environmental Network on the Towards Sustainable Mining Initiative of the Mining Association of Canada.

The Eco Award: The Eco Award is presented in recognition of the contribution made to the ecological health of Northern New Brunswick by either an individual, group of citizens, business or industry. The Eco Award Banquet is held in April in Bathurst near the date of Earth Day.

Winners 2001: Nepisiguit Salmon Association

Winners 2002: Gilbert Sewell: Pabineau First Nation

Mary Gautier and the late Ron Gautier

Winner 2003: Nepisiquit Chaleur Solid Waste Commission

Winner 2004: Mike Lushington, Dalhousie

Bathurst Healthy Communities Network

Winner 2005: Centennial Park Citizens Committee

Winner 2009: Coronation Park Committee

Winner 2010: Victoria Park Enhancement Committee

Volunteers

1999-2006: Brenda Kelley, volunteer Community Development Coordinator

Board of Director's: 12 citizens of various backgrounds

City of Bathurst

Various local citizens and organizations