

Annual Report

2014

Environmental Stewardship *in Jasper*



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Canada

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Canada



Highlights from 2014

The Municipality of Jasper and Parks Canada work together to make Jasper a more sustainable community. Values of environmental stewardship, economic health, social equity, cultural vitality and participative governance defined in the Jasper Community Sustainability Plan set the course and shape strategic priorities.

The Environmental Stewardship program integrates the priorities of residents with those of Parks Canada and the Municipality of Jasper. Both organizations equally fund the program with the terms detailed in a Memorandum of Understanding. In 2014 areas of focus were energy efficiency, climate change and waste management with a strong emphasis on communication, education and engagement. Supporting local organizations with their environmental initiatives is also a priority.

Highlights from the year included:

- Launch of the Residential Energy Efficiency Rebate Program
- New beverage container recycling bins for park day-use areas
- Installation of three commercial compost bins
- New contract for the collection of beverage containers for recycling
- Youth Sustainability Conference
- Public education events:
 - Green Roof Seminar
 - Waste documentary The Clean Bin Project
 - Food waste documentary Just Eat it with the filmmakers
 - Earth Day 'Walk for Water'.

Janet Cooper, Environmental Sustainability Coordinator



Table of Contents

<i>Highlights from 2014</i>	2
<i>Community Vision and Priorities</i>	3
<i>Program Management and Funding</i>	4
<i>Energy and Climate Change</i>	5
<i>Waste Management</i>	6
<i>Waste Diversion</i>	7
<i>Education and Outreach</i>	8
<i>Special Events</i>	9
<i>Funding</i>	11
<i>Professional Development</i>	12

Community Vision

Jasper is a community in which individual and collective actions respect and integrate the values of environmental stewardship, economic health, social equity, cultural vitality and participative governance. 'Jasper is a leader in sound environmental practices and sustainable tourism. Residents and visitors respect the inherent value of Jasper National Park and accept and honour their environmental responsibilities.'

Jasper Community Sustainability Plan

Municipality of Jasper Strategic Priorities 2013-2017

One of the five Jasper Community Sustainability Plan principles is to 'Foster sustainable living by reducing community resource dependency and demonstrating leadership in environmental stewardship.'

The Mayor and Council have established priorities to focus on improving community health through in the areas of Governance, Organizational Health, Fiscal Health, Relationships and Communications. A Governance priority is to provide quality municipal services to the community. This includes responsible waste and water management along with the promotion of energy conservation. Addressing Fiscal Health includes the development of strategic regional waste management goals through membership in the West Yellowhead Regional Landfill Authority. The relationship with Parks Canada, the environment and collaboration with partners enhances health and wellness for the whole community.

Environmental Stewardship Priorities for 2014

The Environmental Stewardship Advisory Committee (ESAC) and Municipality of Jasper and Parks Canada management leaders help set the annual environmental stewardship work plan. The final plan for the year is reviewed and approved by the municipal CAO and the Parks Canada Municipal and Realty Services Manager. Areas of focus for 2014 were:

Energy and Climate Change

- Develop a five year residential energy efficiency rebate program
- Research solar energy technology for campground washroom building retrofit

Waste Diversion

- Increase beverage container recycling in park day-use areas
- Improve recycling programs (fluorescent lights, tin, glass)
- Promote participation in the commercial organics program
- Investigate regional purchase of mobile propane canister recycling unit
- Assist with opportunities for regional coordination and efficiencies

Communication, Education and Engagement

- Develop and manage public outreach events
- Energy efficiency communication campaign
- Increase public awareness of Light Efficient Communities
- Support local organizations with environmental stewardship initiatives

Land Use and Planning Study

- Assist the Parks Canada realty office with the review of land use and planning as required.

Memorandum of Understanding

Parks Canada and the Municipality of Jasper contribute equally to the funding of the environmental stewardship program. As per the 2014 -2018 Memorandum of Understanding (MOU) funding for the environmental stewardship program in 2014 totaled \$164,430.

Environmental Stewardship Advisory Committee (ESAC)

The Environmental Stewardship Advisory Committee acts as a cooperative link between citizens, Parks Canada and municipal government to provide leadership and guidance to the Environmental Stewardship Program. The committee provides a public perspective, leadership and constructive contributions to environmental stewardship initiatives. The board consists of five members from the community, a representative from Parks Canada and municipal Council and the Environmental Stewardship Coordinator.

Environmental Stewardship Coordinator

The Environmental Stewardship Coordinator reports to the municipal Director of Operations and Jasper National Park's Municipal and Realty Services Manager. The role of the Environmental Stewardship Coordinator is to:

- ◇ Ensure the activities and programs of the Municipality of Jasper and Parks Canada meet identified strategies and goals in the Jasper Community Sustainability Plan;
- ◇ Work with the community of Jasper, the Municipality of Jasper and Parks Canada to establish short and long term strategic goals and actions, directing work towards a high level of environmental performance; and
- ◇ Move the community towards environmental sustainability.



Residential Energy Efficiency Rebate Program

Homeowners are increasingly aware of the close links between energy efficiency and consumption, home comfort and a healthy environment. An energy-efficient home not only reduces energy costs, it is also a better place to live.

An energy-efficient home is better for the environment because less energy means fewer greenhouse gases contributing to climate change. In the upcoming decade global changes are needed to protect human security, economic prosperity and food production from the impacts of climate change and extreme weather. The reduction of energy consumption in addition to increased renewable energy production is required to reduce atmospheric carbon emissions to safe levels.

The Jasper rebate program offers an incentive to residents to reduce their energy consumption through the use of LED lighting, programmable thermostats, and energy efficient furnaces, washing machines and refrigerators. Collectively, changes to individual energy consumption can make a big difference.



Post Purchase Rebates:

High-efficiency furnace	\$500
High-efficiency refrigerator	\$200
High-efficiency washer	\$100
Programmable thermostat	\$50
LED lighting (min purchase of \$75)	\$25

The three year residential energy efficiency rebate program launched in June 2014. By the end of December 2014 rebates had been issued to Jasper residents for:

1	High efficiency (HE) furnace	\$500
10	HE refrigerators	\$2000
3	HE washing machines	\$300
3	Programmable thermostats	\$150
5	LED lighting rebates	\$125



Total \$3075



Rebate programs change the thought process. They spark interest and motivate people to investigate and learn more about how to reduce power consumption in their own homes.

Waste Diversion

Effectively diverting organics and recyclables from Jasper's waste stream decreases the total weight of solid waste that is transported to the West Yellowhead Regional Landfill. At the end of October 2013, Jasper became a member of the West Yellowhead Regional Landfill Authority. The communities of Hinton, Edson, Yellowhead and now Jasper are working together to find regional efficiencies to increase waste diversion. In Jasper diversion programs are in place for kitchen and yard organics, recyclables and the provincial stewardship programs for e-waste, tires and household hazardous waste.

Community Beverage Container Donation Program



In June 2014, a new contract to provide the service of picking up and sorting beverage containers was signed. Fifty percent of the deposit revenue from the community donation bins goes to the program's local participating non-profits.

Fourteen funding applications were received for the disbursement of funds collected from the Jasper Beverage Container Recycling Donation Program during Dec 2013 to May 2014. The Environmental Stewardship Advisory Board (ESAC) allocated funds as follows:

Jasper Senior's Society	\$1,000	to operate the Senior's bus
Jasper Food Bank	\$ 500	to purchase food
Friends of the Library	\$ 700	to fund workshops Jasper
Yellowhead Museum	\$1,300	storage sea-can alterations
Total	\$3,500	

Commercial Compost Bins

Commercial businesses in Jasper can participate in the organics collection program. They are provided with a 64 gallon roll bin and receive free pickup - two times per week in the winter and three times per week in the summer.



Commercial Organics bin

In some cases the business diverts a quantity of organics that justifies a larger dedicated bin. This was the case with the Jasper Brewing Company. The town's two grocery stores also have hydraulic bins for organics. Efforts continue to install more commercial communal bins where space permits.

Jasper Reuse-it Centre

The Jasper Reuse-it Centre opened in May 2012 in the Stan Wright Industrial Park. The location was not ideal for foot traffic and so the store was relocated to the basement of the Anglican Church Hall in June 2013. In spite of a more accessible location, a much lower rent and reduced hours and wage for the manager, the Reuse-it Centre struggled to break even. By the summer of 2014 it was clear the operation was not sustainable and the store closed.

The United Church Thrift shop continues to do well selling mainly clothes and household items. The shop is rent-free and operates exclusively with volunteers. The Facebook groups Jasper Buy and Sell has been very successful in the trade of used furniture and goods.

Waste Diversion				
Waste Category		Weights (MT)		
Data Source	Material	2013	2014	
BCMB	Beverage containers	441.48	346.19	
Various Brokers	Cardboard	428.03	385.81	
	Mixed Paper/Newsprint	149.05	111.13	
	Mixed plastic	13.66	17.13	
DBS Environmental	Household Hazardous Waste	5.01	4.58	
	Batteries	0.69	1.07	
	Fluorescents/Halides	0.78	1.25	
	Paint	14.79	14.98	
	Ewaste	24.26	25.34	
Transfer Station	glass	22.49	20.22	
	waste oil	3.41	5.07	
	vehicle tires	21.78	19.91	
	scrap metal	99.59	169.15	
	appliances	37.01	32.04	
	tin / aluminum	16.41	12.94	
	yard waste	110.40	115.02	
	wood chips	44.13	57.84	
	wood shingles	26.26	8.32	
	clean wood	184.63	156.60	
	trees	165.21	160.13	
	kitchen organics	396.42	395.45	
	Total weight diverted		2205.49	2060.17
	TS to Hinton landfill	mixed solid waste	3794.11	3574.43
Private haulers from from Jasper to Hinton Landfill		271.76	133.45	
Jasper high school construction waste	anomaly		-725.00	
Total weight to landfill		5129.27	5160.56	
Total weight to landfill + total diverted		7334.76	7220.73	
Diversion Rate		30%	29%	
United Water (WWTP)	Biosolids	2844.13	3323.10	
Transfer Station	Propane Canisters	2013	2014	
		units	5206	8204

Note: Some material weights are missing from the Transfer Station on days when the scale is unmanned.

Diversion Rate

The diversion rate is the weight of materials diverted (recyclables and organics) over the total waste generated (diverted material plus waste entering the landfill). It is important to note the diversion rate is an indicator of performance but does not give the full picture. It is greatly influenced by weight. Greater amounts of lightweight material such as plastic do not affect the diversion rate by much.

Jasper's waste diversion rate in 2014 remained relatively consistent compared to the previous year. An adjustment was made for the weight from the demolition of the Jasper high school. Collection weights were slightly down in beverage containers and fibre. The collection of kitchen organics remained the same. The total amount of mixed solid waste being trucked from the Transfer Station to the Hinton landfill was down 220 MT. The collection of e-waste (computers and TVs) increased by one MT over 2013.

New Beverage Container Recycling Bins

In early February Jasper received eight new Sentinel recycling bins, each valued at \$2338, from the Community Champions Grant Program with ABCRC (Alberta Beverage Container Recycling Corporation) for a total value of close to \$20,000.

These bins will be placed in parking lots at the following busy day use areas: Maligne Canyon, Lake Edith, Lake Annette, and the 5th and 6th bridge on the Maligne Road. A requirement of the grant is to report on the collection numbers from the donated bins.



Education and Outreach

A perennial priority of the environmental stewardship program is to promote public education and communication, and to manage outreach events to highlight best environmental practices and show people how to incorporate them into their everyday lives. The following events, education and communication activities took place in 2014.

2014	Event	Activity	Audience	Key message / impact
March 15	Seedy Saturday	Seed exchange, info sessions, social	Residents, Jasper Local Food Society	<ul style="list-style-type: none"> • promoting local gardening, sustainable gardening, the Farmer's Market, the community garden
April 22	Earth Day	Walk for Water	Residents	<ul style="list-style-type: none"> • raise awareness about the global water crisis and to raise funds to increase access to clean water in African communities through WaterCan, a Canadian charity
May 2-3	Youth Sustainability Conference	Youth conference with tours, activities, speakers	Regional high school students - Jasper, Hinton, Edson, Grande Cache	<ul style="list-style-type: none"> • Creating connections amongst sustainability groups, sharing ideas to inspire action, learning about green building and sustainable tourism
June 1 - 7	National Environment Week	Clean Air Day Wild Wacky Walking Wednesday Stewardship Day Ewaste/HHW Round-up Environmental Stewardship Awards	Residents Local students Visitors	<ul style="list-style-type: none"> • Bike Town: green transportation, clean air, reduced fossil fuel consumption • Stewardship Day: litter pick-up, caring for our environment, our backyard • Ewaste/HHW Round-up/Shred-it: proper disposal and recycling • Clean Air Day / Wild Wacky Walking Wednesday where students dress up and find creative green modes of transportation to get to school • Environmental Stewardship Awards: recognizing sustainable initiatives and practices of local residents and businesses
July 1	Canada Day	Pancake Breakfast	Residents and visitors	<ul style="list-style-type: none"> • Large public Towards Zero Waste event / Rent-a-Plate program and compostable foodware
July 19	Parks Day	Environmental Stewardship booth	Residents and visitors	<ul style="list-style-type: none"> • Energy Efficiency info booth: information about reducing one's carbon footprint • Launch of the residential energy efficiency rebate program
Fall Aug 26-27	Education Resource	Presentation, Discussion group/private interviews	Grade 4 students Mt. Allison University students	<ul style="list-style-type: none"> • Local grade 4 classes - tours of the Transfer Station • Assisted with discussion groups, interviews for a class on a field trip studying sustainability and governance issues
Oct 29	Green Roof Seminar	Public information session	Residents, staff and students of the new high school	<ul style="list-style-type: none"> • Green roof specialist Kerry Ross assessed the new green roof at the high school with recommendations for use and maintenance • general information session in the evening for the public about the benefits of green roofs, construction and maintenance requirements
Nov 18	Documentary The Clean Bin Project	Evening screening at the Museum	Residents, Jasper Local Food Society	<ul style="list-style-type: none"> • Filmmakers Jenny Rustemeyer and Grant Baldwin challenge each other to see who can produce the smallest amount of waste in a year; consumerism and excessive waste are discussed in the film
Dec 15	Documentary Just Eat it	Afternoon screening at the high school; also public evening show	Jasper high school students Residents	<ul style="list-style-type: none"> • Filmmakers Jenny Rustemeyer and Grant Baldwin came to Jasper to present their newest film on food waste; answered questions and led discussion at the end of each screening

Documentaries



Filmmakers Jen Rustemeyer and Grant Baldwin field questions from Jasper students following a screening of their documentary 'Just Eat It - a food waste story'

Green Roof Seminar



Kerry Ross, an expert on green roofs and design gives a presentation at the new Jasper High School.



Earth Day: Walk for Water



Partnered with a local business to raise awareness about clean water.

EWaste and HHW Round-up



Stewardship Day



Pyramid Beach Clean-up



Wild Wacky Walking Wednesday



Special Stewardship Projects



Environmental Stewardship 2014		YTD 2014	BUDGET 2014
1-44-03-00-830	EnvSer-Recy Fed.Cond Grant	(82,215)	(82,215)
1-44-03-00-593	EnvSer-Recy-Stewardship Other Revenue	(11,366)	-
1-44-03-00-920	Transfer From Restricted Funds	-	(15,000)
	Total Revenue	(93,581)	(97,215)
2-44-03-00-110	EnvSer-Recy-Salaries	66,706	67,000
2-44-03-00-130	EnvSer-Recy-Benefits	17,230	17,000
2-44-03-00-210	EnvSer-Recy-Travel & Subsistance	2,801	4,500
2-44-03-00-211	EnvSer-Recy-Postage Costs	-	-
2-44-03-00-214	EnvSer-Recy-Training & Development	2,124	2,000
2-44-03-00-215	EnvSer-Recy-Travel & Subsistence Committee Members	-	2,000
2-44-03-00-220	EnvSer-Recy-Advertising Costs	6,283	8,000
2-44-03-00-230	EnvSer-Recy-Contract Toxic Round-Up	4,894	5,000
2-44-03-00-501	EnvSer-Recy-Materials, Goods & Supplies	2,428	1,500
2-44-03-00-515	EnvSer-Recy-Supplies Env Stewardship Prog	7,011	26,661
2-44-03-00-516	EnvSer-Recy-Supplies Enviroment Week	2,056	5,000
2-44-03-00-540	EnvSer-Utilities	2,046	-
2-44-03-00-762	EnvSer-Transfer to Restricted Funds	57,695	-
2-44-03-00-910	EnvSer-Recy-Residential Energy Efficiency Rebates	2,875	35,000
2-44-03-00-962	EnvSer-Recy-Reallocation of Enviro Bldg Expenses	-	3,983
2-44-03-00-964	EnvSer-Recy-Reallocation of Enviro Bldg Utilities	-	1,786
	Total Expenses	174,149	179,430
	Net expenditure	80,568	82,215
	Revenue Summary	(93,581)	(97,215)
	Expenses Summary	174,149	179,430
	Net operating expenditure	80,568	82,215

Environmental Stewardship Reserve Funds

Each year any unspent operating funds are moved into the environmental stewardship reserve account. Release of funds from this account must be approved by Council and Parks Canada.

Date	Description	Credit	Debit	Balance
Jan 1, 2014				\$55,399
	unspent funds	\$57,695		\$113,094
Jan 1, 2015				\$113,094



2014 Environmental Stewardship Awards

Each year, the Jasper Environmental Stewardship Advisory Committee (ESAC) recognizes environmental stewardship achievements by individuals, organizations, businesses or youth groups in Jasper. The awards recognize activities that enhance, preserve and protect the environment. Awards are given in five categories: energy conservation, waste reduction, water efficiency, environmental awareness and green design. Nominations can include any individual, organization, business or youth group from Jasper that has made a significant contribution to environmental stewardship practices.

The 2014 winners were:

- Jasper Aquatic Centre in the category of **Energy Efficiency**;
- Robinson's Food in the category of **Green Design**;
- Freewheel Cycle in the category of **Energy Conservation**;
- Eva Charlebois in the category of **Environmental Awareness**; and
- Jasper Trail Alliance in the category of **Environmental Awareness**.

Bike Tire Recycling



The bike tire recycling program is a partnership between Alberta Recycling and the Municipality of Jasper. Bike tires are picked up and processed by Liberty Tire Recycling in Sturgeon County. Consumers in Alberta pay an environmental fee on vehicle tires to fund the collection, transportation and recycling of tires. However, bike tires are not included in the provincial stewardship program and sale prices do not include the environmental fee. Liberty Tire Recycling picks up the bike tires at their own expense.

Professional Development

- ◆ **ZERO 2014 – Low Carbon Conference April 15-17, 2014**
The ZERO 2014 conference was co-hosted by the City of Edmonton in partnership with Climate Change and Emissions Management Corporation (CCEMC). The conference focused on the challenges of climate change, carbon reductions and opportunities that exist through technology and innovative solutions. Several of the keynote speakers emphasized that energy efficiency remains one of the best investments at this time. Energy efficiency saves money, reduces greenhouse gas emissions and the cumulative gain over time is substantial. Rebates programs help generate interest, increase awareness and effect behaviour change.
- ◆ **Strategies for Community Energy Management Sept 23, 2014**
Webinar with Alberta Energy Efficiency Alliance (AEEA) in collaboration with Municipal Climate Change Action Centre (MCCAC). Two presentations focused on sustainable energy and carbon management in Alberta.
- ◆ **Social Norms Workshop Oct. 25, 2013, Palisades Centre**
This one day workshop was organized by the Jasper Community Team. There are many applications of social norms marketing relevant to the promotion of recycling and composting.
- ◆ **Webinar - Passive Houses November 4, 2014**
This webinar reviewed passive houses, principles, benefits and costs, practical experiences and lessons learned.