

# ESD Project Summary Sheet

## Basic Information

<b>Title of project</b> <i>(should be concise and within approximately 25 words)</i>			
Too Much and Too Little Water: Regional RCE Strategizing for New Farming Livelihoods and Improved Water Management on the Canadian Prairies			
<b>Submitting RCE</b>			
RCE Saskatchewan			
<b>Contributing organization(s)</b> <i>(Individual RCE member organizations and/or non-members)</i>			
RCE Saskatchewan Strategic Infrastructure Working Group, Calling Lakes Ecomuseum			
<b>Author(s) and affiliation(s)</b>			
Roger Auguste Petry, PhD, Co-coordinator, RCE Saskatchewan and Associate Professor of Philosophy, Luther College at the University of Regina (Canada)			
<b>Format of project</b> <i>(manuscript or audiovisual)</i>	Manuscript	<b>Language</b>	English
<b>Keywords</b> <i>(3-5 key concepts included in the case study)</i>			
sustainable agriculture, water diversion governance, salinization, Quill Lakes, Canadian Environmental Assessment			
<b>Date of submission</b> <i>(or update, if this is an update of an existing case study)</i>		January 15, 2018	
<b>Web link</b> <i>(of the case study or lead organization if available for more information)</i>		<a href="http://www.saskrce.ca/node/2607">http://www.saskrce.ca/node/2607</a>	

## Geographical & Education Information

<b>Country</b> <i>(where site(s) or activities described in the case study are located – if multiple, please list all participating countries)</i>								
Canada								
<b>Location(s)</b> <i>(subnational units and/or cities within the country or countries – leave blank if specific location(s) cannot be identified)</i>								
Province of Saskatchewan, Quill Lakes Basin and Last Mountain Lake/Qu'Appelle River Watershed								
<b>Longitude/latitude or Google Maps link</b> <i>(if location is identified)</i>								
105°13'30.6"W / 51°25'14.4"N (Last Mountain Lake National Wildlife Area)								
<b>Ecosystem(s)</b> <i>(please place an "x" in all appropriate boxes)</i>								
Forest		Grassland <b>X</b>		Agricultural <b>X</b>		In-land water <b>X</b>		Coastal
Dryland <b>X</b>		Mountain		Urban/Peri-urban		Other (Please specify)		
<b>Level of Education</b> <i>(please place an "x" in all appropriate boxes)</i>								
Primary		Higher <b>X</b>		TVET		Youth (Informal)		
Secondary		Teacher Ed.		Community <b>X</b>		Other (Please specify)		
<b>Socioeconomic and environmental characteristics of the area</b> <i>(within 50 words)</i>								
Saskatchewan, with 44% of Canada's agricultural land, has been called the "Bread Basket of the World" because of its grain exports. Originally covered with natural prairie the land has been transformed by intensive mechanized agriculture. Farmers have further converted prairie wetlands (that act as natural water storage) to maximize profits.								
<b>Description of sustainable development challenge(s) in the area the project addresses</b> <i>(Within 50 words)</i>								
With converted wetlands unable to store excessive snow melt/rainfall, farmers have resorted to illegal drainage, flooding downstream landowners and expanding the saline Quill Lakes. A proposed diversion of saltier water into Last Mountain Lake, site of a migratory bird sanctuary, is resisted, with proposals for new uses of upstream water.								

## Contents

<p><b>Note: The following fields are used for information about activities described in the project or the production of the project itself, and contents may vary depending on the nature of the case project. For example, a project about on-the-ground teaching or training may include the rationale, objectives etc. for the activities; a case study about an ESD-related policy may describe the policymaking process; or a toolkit may address particular practices used within ESD. Please make an effort to fill as many fields as possible.</b></p>			
Status (“ongoing” or “completed”)	Ongoing	Period (MM/YY to MM/YY)	06/2017 to 01/2018
<p>Rationale (<i>why activities or policies described, or information shared through the educational practices/material are needed – within 50 words</i>)</p> <p>Currently due to climate change in the Western Canadian Prairie ecosystem there is the need for improved water management and storage due to precipitation variability. Improved policies are needed to prevent drainage strategies imposing externalities on downstream users.</p>			
<p>Objectives (<i>goals of activities or policies described, teaching or learning outcomes – within 50 words</i>)</p> <p>The primary goal has been to enable either a Provincial or Federal environmental assessment of a proposed diversion of higher salt water content into a freshwater system where a Federal Migratory Bird Sanctuary and Federal Wildlife Area are located.</p>			
<p>Activities and/or practices employed (<i>within 50 words</i>)</p> <p>Formal RCE Saskatchewan submissions to provincial and federal governments providing detailed analysis in support of an Environmental Impact Assessment along with local public education and mobilization efforts.</p>			
<p>Results (<i>within 50 words</i>)</p> <p>Start of the proposed water diversion project has been delayed until the Government of Canada determines whether to conduct an Environmental Assessment of the project. Local mobilization has occurred to help educate the public and media on the need for an assessment.</p>			
<p>Lessons learned (<i>factors in success or failure, challenges and opportunities – within 40 words</i>)</p> <p>The RCE Saskatchewan strategy has relied on multiple sources of expertise (academic, indigenous, local, and professional) in putting forward a compelling case to not proceed with the diversion. There is a strong need to incorporate the SDGs to show opportunity costs of the current proposal.</p>			
<p>Key messages (<i>within 40 words</i>)</p> <p>Local and regional RCE structures are able to rapidly mobilize to provide constructive input in the service of preventing unsustainable developments and sustainable agricultural solutions.</p>			
<p>Relationship to other RCE activities (<i>if the project is related to any other RCE collaborative activities, regional plans, working groups, etc.</i>)</p> <p>This project continues to focus on sustainable infrastructure and the need for sustainable water use on the prairies. It reflects lessons learned in engaging a proposed potash mine in Saskatchewan on behalf of a local farming community.</p>			
<p>Funding (<i>any relevant information about funding of activities or projects described in the case study</i>)</p> <p>No funding was received for the RCE's activities. Efforts have been voluntary to date. Some funding is now being raised by new local organizations being set up.</p>			

## Contributions to Global Agendas

10YFP programmes and SCP-related targets (<http://web.unep.org/10yfp/about/10yfp-and-sdgs>)













Please place an “X” in the “direct” or “indirect” boxes next to any of the 10YFP programmes and SCP-related targets to which the work described in this case study contributes as appropriate. Note: please mark only those that the case actually has made or is making a contribution, not those to which it could make a potential contribution in the future.






Program	Description	Direct	Indirect
	<b>Sustainable Public Procurement Programme (SPP)</b> SPP brings together actors interested in collectively promoting the supply and demand of sustainable products through SPP.		
Target	Description	Direct	Indirect
	Promote public procurement practices that are sustainable, in accordance with national policies and priorities		
	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle		
Program	Description	Direct	Indirect
	<b>Consumer Information for SCP (CI-SCP)</b> Consumer information is defined as a range of tools and systems that seek to enable consumers to make more sustainable choices about services and products, including in their use and end-of-life phases. The focus is on information presented ‘to the consumer’ (individual or end-use consumer), including information from government and business to consumers, as well as from consumer to consumer.		
Target	Description	Direct	Indirect
	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	X	
	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle		
Program	Description	Direct	Indirect
	<b>Sustainable Tourism Programme (STP)</b> The mission of the 10YFP Sustainable Tourism Programme is to support cooperation between stakeholders for the development and implementation of good practices in resource efficient and low-carbon tourism, reducing biodiversity loss, conserving ecosystems, preserving cultural heritage, alleviating poverty and improving sustainable livelihoods.		
Target	Description	Direct	Indirect
	By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products		
	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products		
	By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism		
Program	Description	Direct	Indirect

	<b>Sustainable Lifestyles and Education (SLE)</b> The programme's vision is of a world where sustainable lifestyles are desirable, beneficial and accessible for everyone; enabled, supported and encouraged by all sectors of society.		X
<b>Target</b>	<b>Description</b>	<b>Direct</b>	<b>Indirect</b>
	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature		X
	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development		X
<b>Program</b>	<b>Description</b>	<b>Direct</b>	<b>Indirect</b>
	<b>Sustainable Food Systems (SFS)</b> Launched in April 2016, the vision of the Programme is that "all food systems are sustainable, delivering food security and nutrition for present and future generations".		X
<b>Target</b>	<b>Description</b>	<b>Direct</b>	<b>Indirect</b>
	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality  By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	X	X
	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses		
<b>Program</b>	<b>Description</b>	<b>Direct</b>	<b>Indirect</b>
	<b>Sustainable Buildings and Construction</b> The vision of the SBC programme of the 10YFP is to achieve a situation in 2030 where "all stakeholders involved in the planning, design, construction, commissioning, management operation and deconstruction of buildings have a common understanding of sustainable buildings and the knowledge, resources and incentives required to create, maintain and use them; structures that are healthy to live and work in, that sustainably utilise energy, water, land and other key resources, respecting environmental limits, and ultimately have a minimally adverse impact on the natural world, supporting social and economic development."		
<b>Target</b>	<b>Description</b>	<b>Direct</b>	<b>Indirect</b>
	Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning  By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels  Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials		X
	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse		

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

Please place an “x” in the “direct” or “indirect” boxes next to any of the UN Sustainable Development Goals to which the work described in this case study contributes as appropriate. Note: please mark only those that the case actually has made or is making a contribution, not those to which it could make a potential contribution in the future.

SDG	Description	Direct	Indirect
	End poverty in all its forms everywhere		X
	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	X	
	Ensure healthy lives and promote wellbeing for all at all ages		
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		
	Achieve gender equality and empower all women and girls		
	Ensure availability and sustainable management of water and sanitation for all	X	
	Ensure access to affordable, reliable, sustainable and modern energy for all		
	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all		X
	Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation		X
	Reduce inequality within and among countries		
	Make cities and human settlements inclusive, safe, resilient and sustainable		
	<b>Ensure sustainable consumption and production patterns</b>		
12.1	Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries		
12.2	By 2030, achieve the sustainable management and efficient use of natural resources	X	
12.3	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses		
12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment		
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse		

12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle		
12.7	Promote public procurement practices that are sustainable, in accordance with national policies and priorities		
12.8	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature		X
12.A	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production		
12.B	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products		
12.C	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities		
 13 CLIMATE ACTION	Take urgent action to combat climate change and its impacts		X
 14 LIFE BELOW WATER	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	X	
 15 LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss	X	
 16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels		X
 17 PARTNERSHIPS FOR THE GOALS	Strengthen the means of implementation and revitalise the global partnership for sustainable development		X