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How are Social and Economic Activities Affecting the Health of Lake Winnipeg?

ESSENTIAL QUESTION 3: How are Social and Economic Activities Affecting the Health of Lake Winnipeg?

Introduction

There are so many different social and economic perspectives when it comes to Lake Winnipeg. Some of the perspectives are best covered by the whole class, so students can discuss the impact of poor stewardship on the livelihood of communities that live on the lakeshore. Another goal in this section of the course is to have groups of students explore one perspective in depth, and then teach the rest of the class about what they have learned by using a town hall scenario.

Resources to Plan Your Teaching

CEC Manitoba website www.cecmanitoba.ca/index.cfm?pageID=1

"The Living Earth." *The Sharing Circle* (Season 16, Episode 6). This episode of the *Sharing Circle* explores the Indigenous view of the Earth and how this view contributes to the understanding of the health of Lake Winnipeg, The Boreal Forest, and the entire planet.

"As the world teeters on the brink of environmental collapse, this story examines people who respect the indigenous world view that the Earth is our mother, the rivers lifeblood flowing in her veins, and the plants and animals our brothers and sisters. By looking at the world this way, these people help preserve the environment around them and across the planet, and therefore hold the key to humanity's survival." (Retrieved from <www.thesharingcircle.com/shows.html>)

The episode highlights Sophia Rabliauskas and the effort her community is leading to protect the northeast shore of Lake Winnipeg.

Notes

Lesson: The Living Earth

Specific Learning Outcome

SLO D2: Integrate knowledge from various disciplines beyond the natural sciences, as necessary, in order to complement and represent the scientific world view. *Examples: the arts, mathematics, language arts, social studies...*

Teacher Background

There are many First Nations and Métis communities located within the Lake Winnipeg area, several of which are along the shorelines of the lake. Aboriginal people have a connection to the land and water that goes beyond simply appreciating its usefulness. In this lesson, students explore Aboriginal perspectives of the lake and its watershed.

The Three A's

Activate: Show students a map of the Lake Winnipeg watershed, and identify the many First Nations/Métis communities that lie within the watershed. Ask students how these communities may be affected by the health of the lake.

Acquire and Apply: Show students episode 6, season 16, of *The Sharing Circle*. The episode is about the Poplar River First Nation and the efforts they are going through to have the eastern shoreline of Lake Winnipeg declared a UNESCO World Heritage site.

Probing Questions

Have students discuss the following questions in small groups.

Questions

- 1. In the episode, the Elders say that the youth are losing touch with the environment. Do you think that youth, in general, are losing touch with their natural environment? What is your evidence to support your ideas?
- 2. In the episode, Sophia talks about the importance of the Boreal Forest as a natural filter of the lake. What do you think she means, and do you agree?
- 3. Do you think that the east side of Lake Winnipeg should become a UNESCO World Heritage site and be protected from logging and development? Do First Nations and Métis support the idea? Support your argument.

Have students complete an exit slip responding to the following:

The east side of Lake Winnipeg should/should not (circle one) become a UNESCO world heritage site because....

Assessment

Assessment *for* Learning: Review responses in the exit slip, and provide comments on students' use of evidence.

Lesson: Agricultural Operations

Specific Learning Outcomes

- SLO A4: Analyze a controversial issue in the context of science as a community endeavour. Include: activities within the scientific community and potential influences beyond the scientific community.
- **SLO C11:** Synthesize information obtained from a variety of sources.
- SLO C12: Evaluate information obtained to determine its usefulness for one's needs. Examples: scientific accuracy, reliability, currency, relevance, balance of perspectives, bias...
- **SLO C15:** Use bibliographic and electronic research tools to collect information on a selected topic. *Examples: keyword searches, search engine navigation, databases...*
- **SLO C16:** Compare diverse perspectives and interpretations in the media and other public information sources. *Examples: how various media treat scientific information and/or issues...*
- SLO C18: Collaborate with others to achieve group goals and responsibilities.
- SLO C19: Elicit, clarify, and respond to questions, ideas, and diverse points of view in discussions.

Objectives

Students will investigate diverse perspectives on hog farming issues, and be introduced to the proceedings of the Clean Environment Commission by participating in a town hall.

Teacher Background

In 2008, the Province of Manitoba passed *Bill 17: The Manitoba Environment Amendment Act*, which banned the construction or expansion of large swine barn operations in southern Manitoba, the Red River Valley, a Special Management Area, and the Interlake. This bill was the result of a report produced by the Clean Environment Commission of Manitoba (CEC). The CEC is an arms-length organization that investigates and provides advice to the government on issues related to the environment. The commission is responsible for holding public consultations on proposed development projects where non-governmental organizations, concerned citizens groups, and private citizens, as well as the developers and local businesses, can present their cases to the commission. The commission then compiles the information and creates a report with a recommendation to the government. Participating in the commission is the right of every citizen of Manitoba, and knowing the process and how to create a submission is an important part of being able to participate in the decision making of some of the more heated issues about the environment. In the following lesson, students prepare a CEC submission for a fictitious hog barn proposal in an area outside the banned area.

Resources to Plan Your Teaching

- CEC Manitoba website www.cecmanitoba.ca/index.cfm?pageID=1
- The following site provides a step-by-step description of the CEC process and the requirements for putting together a submission to the commission. www.cecmanitoba.ca/UserFiles/File/Participants%20Handbook.pdf
- Environmental Sustainability and Hog Production in Manitoba www.cecmanitoba.ca/File/Hog%20Production-%20Final%20Report2.pdf

The following is a list of resources to assist educators with media literacy, critical thinking, and diversity.

Applicable Bibliographies at Manitoba Education Library:

- Media Literacy Bibliography (2001): www.edu.gov.mb.ca/k12/iru/library_publications/bibliographies/media_ literacy_2001_10.pdf
- Antiracism Bibliography (2001): www.edu.gov.mb.ca/k12/iru/library_publications/bibliographies/ antiracism_2001_12.pdf
- Manitoba Education Library Catalogue: www.edu.gov.mb.ca/k12/iru/

Manitoba Education Website Resources:

- Literacy with ICT website: Professional Learning Experiences for Educators www.edu.gov.mb.ca/k12/tech/lict/let_me_try/le_teachers.html The following learning experiences would be applicable:
 - 1. Bogus Websites
 - 2. Internet Literacy 2: Evaluating Web Content
- Manitoba Education, Citizenship and Youth. A Continuum Model for Literacy with ICT Across the Curriculum. Winnipeg, MB: Manitoba Education, Citizenship and Youth, 2006.
 www.edu.gov.mb.ca/k12/tech/lict/resources/handbook/lict.pdf
- Diversity website for educators: www.edu.gov.mb.ca/k12/diversity/educators/what.html
- Social Studies Learning Resources (Annotated Bibliography): www.edu.gov.mb.ca/k12/learnres/bibliographies.html#social
- ELA Learning Resources (annotated bibliography): www.edu.gov.mb.ca/k12/learnres/bibliographies.html#ela

Other Web Resources

MediaSmarts.ca http://mediasmarts.ca/

A Canadian not-for-profit charitable organization for digital and media literacy. This website has resources for educators and students to support their learning about digital and media literacy. A search on the MediaSmarts.ca website using the keyword *bias* returns many resources for teaching about bias, stereotyping, and prejudice found in multiple types of media (print, online, television, radio, etc.).

- Critical Thinking Compendium http://critical-thinking.iste.wikispaces.net/ Resource for teaching critical thinking and Internet literacies.
- Diigo.com
 https://groups.diigo.com/index
 Diigo is a social bookmarking site that provides a tool for people to pool their findings. Search using the keywords *critical thinking* to find resources submitted by users.

Scenario

On Wednesday, September 24, 2008, the Government of Manitoba passed *Bill 17: The Manitoba Environment Amendment Act*, which banned swine barn construction or expansion in most of eastern Manitoba. The bill established a permanent moratorium on the construction of new or expanded swine barns in southeastern Manitoba, the Red River Valley, a Special Management Area, and the Interlake. Bill 17 was the result of a report produced by the Clean Environment Commission of Manitoba called Environmental Sustainability and Hog Production in Manitoba, which states "…while we did not focus our investigation on Lake Winnipeg, we were always cognizant that most of the surface water in Manitoba ultimately flows through that lake." (p. 13)

Taiwan Salt is proposing a 80,000-head hog barn facility in the Minnedosa region of Manitoba.

Notice of Environment Act Proposal

Manitoba Conservation has received a proposal pursuant to the *Environment Act* from the following operation, and invites public participation in the review process:

"Taiwan Salt" has filed a proposal to construct and operate an 80,000 head hog barn facility in the Minnedosa region of Manitoba. The operation will create 20 new full-time jobs, provide a local client for grain and feed supplies, and put thousands of dollars into the local community, beginning with the construction of a new recreational facility for the town. The Three A's

Activate: Read a few headlines taken from local and national newspapers that have to do with the construction of hog barns. Try to gather a selection of headlines that balance the view.

Acquire and Apply: Talk to students about CEC Manitoba and its role in ensuring there is public participation in decision making when it comes to the environment. Go over the CEC process for a hearing, and provide some recent examples that can be found on the CEC website. Invite individuals who may have submitted and presented to the commission to talk about their experience, and how and why they may have decided to participate.

Provide students with the scenario, and split students into pairs or groups that represent different stakeholders. Use the cards provided, each one describing a different stakeholder group and some beginning resources.

Hold a commission hearing where each group provides a submission and gets to present at the hearing, and then have the class also act as the commission and develop recommendations and a final report.

Ask students to think critically about why these stakeholder groups have taken their respective positions, and evaluate their potential motives and biases. The Manitoba Education document *A Continuum Model for Literacy with ICT Across the Curriculum* describes critical thinking as "using criteria and evidence to assess the worth or validity of information and to make reasoned judgements. These judgements include distinguishing fact from opinion and interpretation, evaluating information and ideas, identifying perspective and bias, and considering the consequences of decisions and actions." (14)

Assessment

Assessment *for* Learning: Provide feedback to students on their participation in a town hall.

Assessment of Learning: Assess the report using the attached rating scale.

Submission for the Clean Environment Commission of Manitoba on a proposed large operation hog barn in the Minnedosa area by Taiwan Salt.

Requirements

As a stakeholder in the proposed development, prepare a submission addressing concerns or supporting information about the project impacts to the Clean Environment Commission by referring to the Participants' Handbook (note the CEC also examines issues associated with the methodology and scope of the environmental assessment and the adequacy of the proponent's consultation program; however, neither of these are described in this scenario).

The submission must include the following:

- The name, address, telephone, FAX, and/or email of the participant
- A description of the particular interest of the participant (1 page)
- A clear and concise statement of the position taken by the participant (approximately 5 pages)
- A list of all documents to be relied upon (this includes websites, interview transcripts, or any other sources of information used to create the submission)
- A list and CVs of the expert witnesses to be relied upon, and a justification of why they would be good witnesses

Assessment Rating Scale									
The submission is:									
1-poor 2-fair 3-satisfactory 4-very good 5-excellent									
Appropriately formatted	1	1.5	2	2.5	3	3.5	4	4.5	5
Highlights clearly the interests of the participant	1	1.5	2	2.5	3	3.5	4	4.5	5
Clearly and concisely describes the position of the participant	1	1.5	2	2.5	3	3.5	4	4.5	5
Includes an accurate bibliography of the sources of information	1	1.5	2	2.5	3	3.5	4	4.5	5
Clearly justifies why expert witnesses would be called upon	1	1.5	2	2.5	3	3.5	4	4.5	5

Notes

BLM 3-2-1

Spokesperson:

(create a name)

Organization:

Manitoba Hog Producers (representative organization for the many hog producers of Manitoba)

Resources:

Manitoba Pork Council www.manitobapork.com/

Canadian Pork Council www.cpc-ccp.com/index-e.php

Canadian Swine Breeders Association www.canswine.ca/

Spokesperson:

(create a name)

Organization:

Taiwan Salt (international corporation, which was originally involved in one market in Taiwan, that has now branched out into many different markets, including animal production)

Resources:

Maple Leaf Foods www.mapleleaf.com/en/#/entrance

Big Sky Farms www.bigsky.sk.ca/

Spokesperson:

(create a name)

Organization:

Policy Now Canada (independent research institute concerned with issues of economic and social justice)

Resources:

Canadian Centre for Policy Alternatives www.policyalternatives.ca/

Frontier Centre for Public Policy www.fcpp.org/index.php

Spokesperson:

(create a name)

Organization:

Local farmer (local and small grain farmer with a family of four who lives close to the proposed site of the hog barn)

Resources:

Stop the Hogs www.stopthehogs.com/index.htm On this site, there are many editorials and testimonials from local farmers arguing both sides of the issue.

(continued)

BLM 3-2-1 (continued)

Spokesperson:

(create a name)

Organization:

Protect Homer (an organization concerned with the welfare of hogs)

Resources:

www.humanefood.ca/about.html

Spokesperson:

(create a name)

Organization:

Lake Winnipeg Research Consortium (an organization composed of the many researchers of Lake Winnipeg)

Resources:

Lake Winnipeg Research Consortium www.lakewinnipegresearch.org/

Spokesperson:

(create a name)

Organization:

Lake Winnipeg Foundation (an organization made up of individuals who have a passion for restoring and maintaining the health of Lake Winnipeg and its Watershed)

Resources:

Lake Winnipeg Foundation www.lakewinnipegfoundation.org/ ourhistory.html

Spokesperson:

(create a name)

Organization:

Manitoba Association of Cottage Owners

Resources:

Lake Winnipeg Foundation http://macoman.com/

BLM 3-2-2

Newspaper Articles Headlines:

Calling for change at hog barn

The Stonewall Argus and Teulon Times

Hog Barns Are Here; So is the Smell

Norquay North Star February 18, 2004

Mega hog barns: Not in our back yard!

CBC, Broadcast Date: Oct. 11, 2000

Family farms vs. factory farms

CBC, Broadcast Date: Nov. 21, 1993

Won't back down from hog-farm fight, Group plans to challenge province's agriculture rules

By: Carol Sanders *Winnipeg Free Press* 26/10/2009

Protect Water, Stop Calling Names

Letter to the Editor Ted Muir General Manager Manitoba Pork Council *Winnipeg Free Press*, Aug 27, 2003