

Focus:

- » Students recognize the extent to which individual and collective human actions bring about destruction of wetlands.
- » Recognize that this can lead to the endangerment or extinction of wetlands plant and animal species.

Curriculum Connection:

5.10-8 Identify human actions that can threaten the abundance or survival of living things in wetlands ecosystems such as adding pollutants, changing the flow of water, trapping or over hunting wetlands wildlife

Teacher Preparation:

The natural environment has provided all of the necessary means to support survival of Indigenous people for thousands of years; this includes the provision of adequate, clean water and a bounty of healthy food options. Connection to land also provides a spiritual and cultural sense of identity.

From the late 18th to the early 20th century, Aboriginal men transformed their knowledge of the land into trapping for the fur trade; it became an integral component of the Aboriginal participation in Canadian economy. However, as more settlers came to Canada, the registered trapline system was implemented, causing increased competition from non-Aboriginal hunters in the 1920s. As a result, a significant decline in furbearer populations and fur prices occurred in the late 1960s.

These pressures, as well as increased industrial use of lands have affected wetlands and the ability of Aboriginal people to access and spend time on the land.

Industrial development projects, such as oil and gas, have limited the amount, quality, and distribution of land available. There are now many barriers to access the land, including:

- » Gates and fences, constructed by companies to prevent trespassing. This has resulted in the inability of Aboriginal peoples to access traditional territory to pick medicine, hunt, trap and fish.
- » The introduction of irritants such as noise pollution and increased traffic.
- » Physical disruptions, such as bridges and roads that traverse (and thus destroy) wetlands.



Teacher Preparation: (continued)

Most of the wetlands that are left in Alberta are located in the north. This is the area in which the most rapid expansion of oilsands development is also occurring.

Human development and damage of wetland ecosystems is limiting Elders' ability to teach skills and knowledge that would allow the next generations to live on the land. This, in turn affects the transference of traditional knowledge from one generation to the next, including practical skills, spiritual and ceremonial practices, and cultural values.

The impacts of cultural losses suffered through changes to the land include:

- » A general sense of alienation from traditional land.
- » A loss of hope for the sustenance of traditional culture over time.
- » The disruption of traditional family and community structures.



1. Preview the DVD/online video "The H Factor"
www.sacredrelationship.ca/videos/
2. Book the computer lab if computers and printer are not available in the classroom.

Key Learnings:

Any of the following activities can lead to the destruction of wetlands:

- » Over-hunting or over-trapping
- » Introduction of chemicals to the ecosystem, including fertilizers, insecticides, industrial chemicals from runoff
- » Garbage left by individual recreational activities such as camping and hiking
- » Dumping of garbage outside of controlled dump grounds
- » Settlement and inhabitation of areas near or on wetlands
- » Interfering with, redirecting or blocking the flow of water
- » Draining wetlands areas for development or other purposes
- » Global warming causing decrease in water levels and drying up of wetlands

Materials and Resources Required:

- » DVD/online video "The H Factor"
- » Computers, printer

Educational Setting:

- » Classroom/ Computer Lab

Launch:



View the video, "The H Factor" with students. Remind students to watch for as many examples of human destruction of wetlands as they can possibly find in the video.

Following the viewing, ask students give examples and list them on the board. Have each student explain what the potential outcome of this destructive action might be.

Activate:

Brainstorm all of the destructive human actions that the students can think of that would lead to the devastation of a wetland ecosystem.

Extend the list that was already started as a result of viewing the film. Actions will include, but not be limited to:

- » Over-hunting or over-trapping.
- » Introduction of chemicals to the ecosystem, including fertilizers, insecticides, industrial chemicals from runoff, etc.
- » Garbage left by individual activity such as camping and hiking, or dumping of garbage from more than one person.
- » Settlement and inhabitation of areas near or on wetlands.
- » Interfering with, redirecting or blocking the flow of water.
- » Draining wetlands areas for development or other purposes.
- » Dams or rivers.
- » More gas and oil sands development.
- » Forestry.
- » Global warming causing decrease in water levels and drying up of wetlands.

Remind students that they have spent several weeks learning about the importance of balance and Natural Law from an Aboriginal perspective, as well as requirements of a healthy wetland ecosystem from a western science point of view. Invite students to reflect on all that they have learned as they begin their next assignment.

Connect:



Have students choose a partner whom they will work with to create a brochure to bring about awareness of impacts of human actions on wetlands. Inform students that they will be creating their brochures on the computer so that they can print more than one and distribute them to the people for whom they are created.

Once students are in their partners challenge the students to consider the following points prior to beginning the development of their brochures:

- » Audience: is your brochure meant for children, teens, adults, businesses, government, others?
- » Focus: is your brochure directed at one particular type of human action or at several? Remember that you must ensure your audience and the focus fit together. Examples: a brochure for farmers might focus on the negative impacts of fertilizer on wetlands. A brochure for children would not focus on industrial waste.
- » Visual impact: what pictures/images will really draw your audience's attention to the point you are trying to make.
- » Language: the vocabulary that you choose must be appropriate (meaningful) for the audience that you have chosen.
- » Accuracy: Be sure that the information that you present is correct and factual.

Once students have completed their brochures and vetted them through the teacher, students will print a number of brochures and distribute them to their intended audience.



DID YOU KNOW :

THAT ABORIGINAL PEOPLE HAVE BEEN FORCED TO CHANGE THEIR DIETS AND TRADITIONAL LIFESTYLES BECAUSE OF INDUSTRY, DEVELOPMENT AND DESTRUCTION OF THEIR TRADITIONAL LANDS. THIS HAS CAUSED SERIOUS AND WIDE SPREAD HEALTH AND SOCIAL PROBLEMS IN ABORIGINAL COMMUNITIES. MANY ELDERS AND LEADERS CONTINUE TO SEEK WAYS TO PROTECT THEIR TRADITIONAL WAYS OF LIFE, THEIR TRADITIONAL FOOD SOURCES AND THE ENVIRONMENT.

Note to Teacher :

The development of the brochure may require at least one more class period.

In addition, students may require your assistance in making safe and appropriate contact with their intended audience to distribute their brochures. This may be in person, by mail or electronically.