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Our Port Community

This lesson helps students to develop a sense of place as residents of a coastal region as well as sense of personal responsibility for reducing their impact on natural places. Students identify and map the natural places that are special to them in their community and its surroundings, and explore how they can be good stewards of those places. A connection is made between personal stewardship of a special place and the stewardship responsibilities and activities of those working in and managing port-related activities in Prince Rupert.

CLASSROOM TIME REQUIRED

One 50-60 minute lesson and one 30-40 minute follow-up lesson

LEARNING OBJECTIVES AND OUTCOMES

Students will:

- Identify and determine how personal choices and actions have the potential for environmental impacts on local ecosystems
- Explore the concept of stewardship and the role that prevention and mitigation play

MATERIALS REQUIRED

- Prince Rupert Harbour (3958) nautical chart (or a map of Prince Rupert and the coastal region)
- Square pieces of paper (white art paper, approximately 30 x 30 cm and coloured construction paper, approximately 32 x 32 cm), art pens, crayons, pastels or paint
- *My Favourite Natural Place* T-Chart (see *Attachments*)
- Description of the *Green Marine* program on the Port Authority of Prince Rupert's website
- Port-related business and corporation websites describing environmental stewardship initiatives (see *Lesson Plan Resources*)

TECHNOLOGY RESOURCES REQUIRED

Computer and projector or Smart Board

TEACHER PREPARATION

- Students should be familiar with the basic components of maps.
- Prepare your own map of a coastal place that is special to you to share with the students as a model.
- Set up the computer and projector or Smart Board to show the *Green Marine* program page on the Port Authority of Prince Rupert's website.

- Make class copies of *My Favourite Natural Place* T-chart.

CRITICAL VOCABULARY (see Glossary for definitions)

Compass rose

Prevention

Stewardship

Mitigation

LESSON DEVELOPMENT

Activity 1

- Show the students the nautical chart or map of Prince Rupert and coastal region. Lead a discussion with the students about their favourite natural location or site near the coast around Prince Rupert. Share with students a description of your own favourite natural place and tell them why it is important to you. (It could be important for aesthetic, cultural, ecological, personal or spiritual reasons, or any combination of these.)
- Give students a few minutes to select and to think about the natural place that is special to them and then have them pair up and describe the site and why it is a special place with their partner. Encourage students to be detailed with their reasons about why it is special.
- Have students volunteer to mark the location of a natural site that is special to them on the chart or map.

Activity 2

- Give each student a square piece of paper (approximately 30 x 30 cm).
- Have students work individually on a map of their own that represents their special place and shows what is immediately around it.
- Tell students that the map should convey what makes the place important, special or unique. They don't have to worry about scale or accuracy and their maps can be as abstract or as concrete as they wish. Students can be as creative as they wish in representing their place.
- Students should create their own icons/symbols that provide information about the place, in relation to some of the following:
 - Commercial activities (e.g. shops, businesses)
 - Cultural importance (e.g. traditional uses, historical or spiritual significance)
 - How they get to the place (e.g. walking, bus, cycling, driving)
 - Institutional (e.g. school, hospital, library)
 - Leisure activities (e.g. camping, hiking trails, views, swimming)
 - Natural characteristics (e.g. water features, plants and trees, animals)
- The finished map should include:
 - A title and a short (2 sentence) description of what the map represents
 - A compass rose or directional arrow
 - A legend
 - Student's name and the date
- Give each student a square of coloured construction paper (approx. 32 x 32 cm) with which to back her

or his map.

- Join the squares of paper together to make a class quilt of special places. (Don't forget to include your own map!)

Activity 3

- Introduce to the students the idea that human activity has the potential to make an impact on natural ecosystems. Provide some examples. Support students to identify the different types of impacts, for example: damage/degradation, disturbing the flora and fauna, garbage, noise, water quality, etc.
- Have students work in pairs to identify the types of impacts created by human activity on their special places. Give each student a copy of the *My Favourite Natural Place* T-Chart. Have students record their ideas in the *Human Impacts* column of the chart.
- Now, ask students to consider how the impacts they have identified might be prevented or reduced. In particular, ask what they could do to reduce their own impact on their special places. Provide some examples that relate to your own special place.
- Have students work in pairs to identify ways of preventing or reducing the human impacts and record their ideas in the *How to Prevent and Reduce Them* column of the chart.

Activity 4

- Tell students that just as we all individually have a responsibility to act as stewards and care for the natural environment, so too do businesses and corporations.
- Introduce students to the *Green Marine* program on the Port Authority of Prince Rupert's website. Draw students' attention to the seven major environmental issues that the program seeks to address.
- Ask students to make connections between what they can do to reduce their impacts on natural places and what the port related businesses and organizations in Prince Rupert are doing, through the *Green Marine* program (or their own corporate initiatives), to prevent and reduce their impacts on the local coastal environment.

ASSESSMENT

Have students work individually to write a three-paragraph report about their natural place: what makes it special; what the impacts of using it are; and how those impacts can be reduced.

MODIFICATIONS

Older students can choose one environmental issue from the Green Marine program and, through research, identify what actions individuals and corporations involved in activities that generate negative environmental impacts can take to prevent or mitigate this issue. Have students present their findings as a poster or a presentation.

LESSON PLAN RESOURCES

Corporate environmental sustainability and stewardship commitments:

- CN Rail: <http://www.cn.ca/en/delivering-responsibly/community/environmental-sustainability>
- Maher Terminals: <http://www.mahercanada.com/index.cfm/do/environmental.stewardship/>
- Prince Rupert Port Authority: <http://www.rupertport.com/stewardship>
- Ridley Terminals: <http://www.rti.ca/health-safety-environment>
- SMIT: <http://www.smit.com/about-us/company-profile.html>

ATTACHMENTS

My Favourite Natural Place T-Chart

My favourite natural place is: _____

Human Impacts	How to Prevent or Reduce Them