Planning a New National Marine Conservation Area

Lesson Overview:
In this lesson students will decide if the Yukon North Slope is an appropriate site for a new National Marine Conservation Area. They will conduct research by completing a web quest and following research criteria. They will present their findings in a written or oral presentation.

Grade Level:
6-8 (middle school)
This lesson could also be adapted to suit grades 9-12 (secondary school)

Time Required:
- One 60-minute lesson is required to conduct research
- One 60-minute lesson is required to prepare the presentation

Curriculum Connection (Province and course):
Yukon - British Columbia Grade 7 Social Studies – Environment and Society
- Analyze ways that people’s interactions with their physical environment change over time.
- Evaluate the impact of natural processes and human-induced changes on communities.

Link to Canadian National Geography Standards:
Essential Element #2: Places and Regions
- Changes in places and regions over time
- How culture affects places and regions

Oceans Scope & Sequence Standard #2: Places and Regions
- Marine protected areas

Essential Element #5: Environment and Society
- Environmental issues
- Limits and opportunities of the physical environment for human activities

Oceans Scope & Sequence Standard #5: Environment and Society
- Ocean influences on humans

Geographic Skill #1: Asking Geographic Questions
- Plan how to answer geographic questions
Geographic Skill #3: Organizing Geographic Information
- Integrate various types of materials to organize geographic information

Additional Resources, Materials and Equipment Required:
- “Oceans for Life” brochure
- Access to the Internet for the web quest
- Assignment handouts and web quest answer guide
- Access to atlases

Main Objective:
Students will evaluate the Yukon North Slope as a potential site for a new National Marine Conservation Area.

Learning Outcomes:
By the end of the lesson, students will be able to:
- Understand the diversity of the Yukon North Slope and the Beaufort Sea marine region.
- Appreciate the physical and cultural features of the Yukon North Slope and Ivvavik National Park.
- Understand how ancient cultures used the land in the past and how human activity affects the region today.
- Evaluate the Yukon North Slope as a potential site for a new National Marine Conservation Area.
- Plan and organize a presentation based on geographic information.

Lesson:

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<tr>
<th>Teacher Activity</th>
<th>Student Activity</th>
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<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Introduce the idea of protected marine areas to the class by reading “The Importance of Oceans” from the back of the “Oceans for Life” brochure. Explain to students that their assignment is to decide if the Yukon North Slope would be a good choice for a new National Marine Conservation Area.</td>
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## Lesson Development

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<th>First Class:</th>
<th>Second Class:</th>
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<td>Preparation: Decide if students will work individually or in groups. Decide if the students will prepare an oral presentation or a written presentation. Distribute the Assignment Sheet. Ask students to read the introduction and tasks. Instruct students to conduct research by completing the web quest and following the research guide. This should be completed by the end of the 60-minute lesson.</td>
<td>Remind students about what is needed for the presentation. Allow them time in class to prepare. They may require access to the internet or atlases to help them make the map.</td>
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### Web Quest and Research Guide

Complete the web quest and conduct research using the Research Guide.

Prepare the presentations.

### Conclusion

Students present their findings to the class in the form of an oral or written presentation. The class could take a vote to decide if Yukon North Slope is indeed a good site for a new National Conservation Area.

Present findings to the class or submit findings as a written assignment.

### Lesson Extension:

Invite a guest speaker from Parks Canada or the Inuvialuit community to learn more about this region of the Yukon. Ask students to choose other regions of the country that they feel would be good sites for a National Marine Conservation Area.

### Assessment of Student Learning:

Collect the web quest and assess it using the Teacher Answer guide. Evaluate the written or oral presentation by using the assignment criteria.
Planning a New National Marine Conservation Area: Assignment Sheet

Introduction: The Yukon North Slope is being considered as a potential site for a National Marine Conservation Area (NMCA). You work for Parks Canada at Ivvavik National Park. You feel that the Yukon North Slope has marine areas that are worth protecting. You recognize that there are important connections to ancient aboriginal culture in this area and many interesting physical features of the landscape. Would Yukon North Slope be a good site for a National Marine Conservation Area? Does it meet the required criteria? The Regional Director for Parks Canada has asked you to prepare a presentation to determine if the Yukon North Slope is an ideal site.

Your task:
1) Conduct research about the Yukon North Slope to determine whether it meets the criteria for a National Marine Conservation Area. (Complete the web quest and use the Research Guide to help you get started).
2) Design a presentation of your findings. Your presentation should include:
   a) A map showing Yukon North Slope (Make sure it has all the important map elements. Label Ivvavik National Park and the Beaufort Sea).
   b) The written details of your research findings. List the North Slope characteristics that meet or don't meet the criteria for becoming a National Marine Conservation Area.
   c) Visual aids to illustrate the landscape, wildlife and culture of this region.
National Marine Conservation Area Web Quest

The best source of information for your assignment is the Parks Canada website. Complete the web quest below to help you learn more about National Marine Conservation Areas.

- Go to the Parks Canada website at www.pc.gc.ca
- Choose National Marine Conservation Areas of Canada. Find the answers to the questions below using this section of the website.

1. What is a National Marine Conservation Area (NMCA)? Write the definition in the space provided.

2. How many National Marine Conservation Areas exist in Canada? ________
3. Where are they located? __________

4. Circle true or false for the statement below:
   “Canada has the longest coastline in the world.” True False

5. There are _____ marine regions in Canada made up of oceans and the Great Lakes. (Hint: It is a number)
6. Circle true or false for the statement below:
   “National Marine Conservation Areas preserve the environment and do not allow any human activity.” True False

Your introductory research is complete! Proceed to the Research Guide.
Research Guide

A. Criteria:
Below are some of the criteria for a National Marine Conservation Area. You will conduct research to determine if Yukon North Slope meets these criteria.

The site should:
- Be an important area for maintaining biodiversity.
- Protect habitats of endangered species.
- Have exceptional natural and cultural features.
- Have the potential for education and enjoyment.
- Have value for ecological research and monitoring.

Highlight the following features of the Yukon North Slope region in your presentation:
- Geologic features
- Marine features
- Marine and coastal habitats
- Cultural and archaeological features

B. Research Tips:
Here are some good places to begin your research. Use the Parks Canada website to find both areas:
1. National Marine Conservation Areas System Plan (Hint: Choose the Arctic Ocean and then the Beaufort Sea).
2. Ivvavik National Park (Hint: Go to National Parks of Canada, Yukon, Ivvavik)
National Marine Conservation Area Web Quest:
Teacher Answer Guide

The answers for this web quest come from the Parks Canada website at
www.pc.gc.ca

1. What is a National Marine Conservation Area (NMCA)? Write the definition in the space provided.
   Marine areas are managed for sustainable use and containing smaller zones of high protection. Includes the sea bed, the water above it and the species, which occur there. Areas may also include wetlands, estuaries, islands and other coastal lands. These areas are protected from ocean dumping, under sea mining and oil and gas development.

2. How many National Marine Conservation Areas exist in Canada?
   There are currently two NMCA’s in Canada: Fathom Five National Marine Park and Saguenay-St. Lawrence Marine Park. (Information current as of December 1st, 2004)

3. Where are they located?
   Fathom Five National Marine Park is located in Ontario. Saguenay-St. Lawrence Marine Park is located in Quebec.

4. Circle true or false for the statement below:
   “Canada has the longest coastline in the world.” True False
   The answer is True. Canada’s coastline extends over 243,000 km along three oceans. The coastline of the Great Lakes is another 9500 km.

5. There are 29 marine regions in Canada made up of oceans and the Great Lakes. (Hint: it is a number)

6. Circle true or false for the statement below:
   “National Marine Conservation Areas preserve the environment and do not allow any human activity.” True False
   The answer is False. NMCA’s focus is on the sustainable use of marine areas. Fishing and shipping are still allowed but are limited or eliminated from sensitive ecological zones.