

Lesson 5: Marine Planning and Perspectives

Overview: Students will learn about marine planning and various perspectives that are important to this process to ensure sustainable and healthy ecosystems. Students will engage in a critical thinking activity by taking on the role of different perspectives and thinking about resources in the Great Bear Sea.

Subjects: Science, Language Arts

Suggested Time: 3 classes (45-60 minutes)

Materials and Resources:

- Computer, projector and screen
- Lesson 5 Film Clips:
 - Marine Planning (10 mins)
 - Shipping (2 mins) – *optional*
- Teacher Background – Lesson 5
- 5.1: Perspectives on the Great Bear Sea
- 5.2: Traditional Knowledge
- 5.3: Self and Group Assessment

Learning Objectives:

Students will:

1. Understand that marine planning is key to creating a sustainable future for all British Columbians.
2. Learn about collaborative decision-making and how it is an important step when making decisions in the Great Bear Sea region.
3. Identify some of the aims of marine plans, including appropriate and sustainable economic development that will endure over generations.

Lesson Context

This lesson will allow students to learn about marine plans and how these marine plans are important to a sustainable future. It will introduce students to the terrestrial planning with the Great Bear Rainforest and how things have shifted to marine planning in the Great Bear Sea. The students will learn about the Marine Planning Partnership (MaPP) and how 18 First Nations and the Province of British Columbia co-lead a collaborative decision-making process to establish four area-specific marine plans and a regional planning framework for the Great Bear Sea. This process included input from stakeholders, which incorporated different types of Traditional Knowledge, local knowledge and science. This lesson will have the students engaging in a critical thinking activity by looking at four groups and their different perspectives of the Great Bear Sea.

Learning Activities

Activity 1: Marine Planning (45-60 minutes)

1. Ask the students what they think “marine plans” are? Brainstorm together and break down the words “marine” and “plan”. Explain to the students that there are many effects of ocean use and activities on marine life and coastal communities so 18 First Nations and the Province of British Columbia worked together to plan for ocean health and marine uses now and into the future on the North Pacific Coast.
2. Write the date **April 27, 2015** on the board. Explain to the students that this was a very important date in British Columbia. This date marks a milestone for the Great Bear Sea. On this date 18 First Nations and the Province of British Columbia released the marine plans for each of the four sub-regions the Great Bear Sea.
3. Watch the film clip **Marine Planning**.
4. Brainstorm together the key learning from the film clip.
5. The film clip makes reference to terrestrial (Great Bear Rainforest) and marine (Great Bear Sea) planning. Discuss the differences with the students. Explain to the students that terrestrial planning in the Great Bear Rainforest was done first and now the shift has moved to marine planning in the Great Bear Sea. Ensure that the students understand that the land and ocean are interconnected but the plans were done separately. Can the students think of an animal that calls the Great Bear Sea region home that lives on land but is connected to the sea? Discuss how bears are connected to the land and sea.
6. The film clip highlights a theme of access to place and more pressures on the marine environment with the need to access resources. Past pressures were

logging and fisheries while the present pressures include much more. Brainstorm as a large group to see if the students can recall some of those pressures mentioned in the film clip:

- Oil and gas industry
 - Renewable energy industry
 - Cruise ship industry
 - Recreation and sport fisheries
7. Write the quote on the board and the words **resource** and **sustainable**. Divide the class into small groups. Have each group try to connect the quote and the words resource and sustainable/sustainability to create their own definition of a marine plan.
- "We've got to strike this balance, and it's very difficult. We have to be profit oriented, but at the same time we have to consider our environment. And the value of that environment is part of our balance sheet." – Gary Wilson, General Manager, Heiltsuk Economic Development Corporation*
8. Share the group's definitions about marine plans. Remind the students that marine plans help guide appropriate economic and social development that will provide access to place and ensure that the resources are sustainable for future generations.

Activity 2: Perspectives on the Great Bear Sea (2 classes)

Part A (45-60 minutes)

1. Write the word **stakeholder** on the board. Use **5.1: Perspectives on the Great Bear Sea - Part One** for this activity. Using a think/pair/share strategy, have the students consider what the word means.
2. Continue using **5.1: Perspectives on the Great Bear Sea** to create a list of different groups of people that may have different perspectives on the resources in the Great Bear Sea. Discuss the student lists and how the various groups of people have different knowledge and views on resources in the Great Bear Sea.

Teacher Note: It is important for the students to understand that during the Marine Planning Partnership (MaPP) 18 First Nations and the Province of British Columbia co-led a collaborative decision-making process to establish four area-specific marine plans and a regional planning framework for the Great Bear Sea with input and advice from stakeholders. Examples of stakeholders include: commercial fisheries, aquaculture, recreation, tourism, scientists, the general public, etc. See **Teacher Background – Lesson 5** for more information.

3. Draw a line on the board. Label the line with the word “agree” at one end and the word “disagree” at the other. Inform the class they are going to divide into eight groups and take on the role of different groups that use resources in the Great Bear Sea. The task is to agree or disagree with the statement and decide where on the line the group would stand based on the unique perspective.

Agree-----**Disagree**

Draw a perspective randomly from a bag with the following list (there should be two groups of each):

- People who live in the communities in the Great Bear Sea region
- Researchers
- Tourism industry – ecotourism, sport fishers, etc.
- Commercial fisheries

Read the statement and task aloud to the students.

Statement: There are plenty of salmon in the Great Bear Sea.

Task: Decide your viewpoint from the perspective you have been assigned using the statement and where on the line your group would stand. You must try to support your position if other groups question it or have a different viewpoint. Think about where other groups would stand with the statement.

Continue using **5.1: Perspectives on the Great Bear Sea - Part Two** for this activity.

4. With students in eight groups, provide time for them to discuss their views on the statement, think about the views of others and provide support for their positions.

Part B (45-60 minutes)

1. Once the eight small groups have their positions decided and a plan to support it, have the groups join the matching group to discuss opinions. The class will now be in four groups. Do the positions match? How are the positions the same? How are the positions different? Have students share information and opinions. Use **5.1: Perspectives on the Great Bear Sea – Part Three** for this activity.
2. Have each group representing a different perspective share their opinions on the statements with the whole class and their rationale for agreeing or disagreeing with the statement. Allow questions and comments from the other groups as each of the four perspectives present.
3. Discuss additional information that may still be missing or need to be researched. Where could you find this information?
4. Continue to discuss why marine plans are important and how salmon is a vital

resource for many people as well as the ecosystem. It is important to plan for ocean health and marine uses now and into the future. Using **5.1: Perspectives on the Great Bear Sea – Part Four** discuss and record recommendations that could be passed along to the decision makers.

5. Use **5.2: Traditional Knowledge** to read the students a statement from Doug Neasloss, Chief Councillor, KITASOO/XAI'XAIS Band Council & Resource Stewardship Director, KITASOO/XAI'XAIS Integrated Resource Stewardship Authority. His text shares Traditional Knowledge from his region about some of the harvested resources in the area.
6. Use **5.3: Self and Group Assessment** to conduct a self and group assessment.

Extension Ideas

- Ask the students what marine traffic is and brainstorm the issues connected to marine traffic. Marine traffic is a federal issue so the marine plans do not include this but it is something that is being brought to attention and the implementation process is underway so this can be incorporated into future planning in the marine environment. Watch the film clip **Shipping**. Have the students come up with their own guidelines on marine traffic for the Great Bear Sea.

Assessment Ideas

- Formatively assess students' engagement in individual and group work as well as large group discussion.
- Assess student work from the lesson.
- Collect the self and group assessment using **5.3: Self and Group Assessment**.

Teacher Background – Lesson 5

The Marine Planning Partnership for the North Pacific Coast (MaPP) represents an innovative response and approach to the challenge of ensuring sustainable use of the MaPP study area, or Great Bear Sea for generations to come. The MaPP is a co-led process between 18 First Nations (listed below) and the Province of British Columbia to establish four area-specific marine plans and a regional planning framework. Over the course of four years, the planning teams created new marine plans in consultation with marine stakeholders from the fishing, tourism, recreation, academia, local government, renewable energy, and other sectors. See more at www.mappocean.org.

The plans include special management zones for tourism, aquaculture, and First Nations culture and protection management zones for marine life and habitat. The plans address a variety of marine uses, activities and values and contain hundreds of strategies that will lead to solutions and revitalise the North Coast. The year 2015 marked an important milestone for shaping the future of Canada's North Pacific Coast and the Great Bear Sea. On April 27, 2015, after four years of planning, marine plans for four sub-regions (North Coast, Central Coast, Haida Gwaii, North Vancouver Island) were released and made public on the MaPP website. The 18 First Nations* working on the MaPP include:

Central Coast

- Nuxalk Nation, Heiltsuk Nation, Kitasoo/Xai'xais First Nation, Wuikinuxv Nation

Haida Gwaii

- Council of the Haida Nation, Old Massett Village Council, Skidegate Band Council

North Coast

- Gitga'at First Nation, Gitxaala First Nation, Haisla First Nation, Kitselas First Nation, Kitsumkalum First Nation, Metlakatla First Nation

North Vancouver Island

- Mamalilikulla Qwe'Qwa'Sot'Em First Nation, Tlowitsis Nation, Da'naxda'xw Awaetlatla First Nation, Gwa'sala-'Nakwaxda'xw First Nations, We Wai Kum First Nation, Kwiakah First Nation, K'ómoks First Nation

** This list contains over 18 First Nations. Some Nations and territories had been amalgamated post-contact and have very recently been re-defining traditional territories and spaces.*

It is important to note that the land and sea is interconnected and not separate but the levels of government that oversee these areas are different. The Great Bear Sea represents an interesting area where both provincial and federal jurisdiction comes into play. Traditionally, the federal and provincial governments have taken a sector-by-sector approach to management, rather than looking at the space in an integrated way.

This approach has been challenged by groups calling for the need to look at economic, social, ecological and cultural factors across all sectors when making decisions that will impact the area.

The marine plans were created using a collaborative government-to-government planning process. This is innovative and globally significant; there is no other country where a marine plan has been developed by Indigenous and provincial governments. The First Nations, as sovereign governments, are thus owners of the decision-making and planning that is happening in their traditional territories, in collaboration with the provincial government. Stakeholders were consulted and their input incorporated, but it's the province and First Nations as governments that developed the plans and sought stakeholder participation and input. The stakeholders included the various marine sectors like fishing, recreation, aquaculture, marine transportation, conservation, etc. The marine plans were made using informed scientific, traditional and local knowledge. The goal of the marine plans are to provide recommendations for areas of marine management including use, activity in the region, protection, and guidance to make well-informed decisions regarding sustainable economic development and stewardship. The marine plans help plan for the future while creating economic opportunities, reducing conflicts and ensuring the resources continue to be accessible and that the ecosystem of the Great Bear Sea remains healthy.

The activities modelled in this lesson are not meant to model the processes used in regions in the MaPP, but engage students in critical thinking skills by focusing on the perspectives of different groups of people that use the resources in the Great Bear Sea. Worldwide, there is great interest in MaPP and learning more about how the planning was done, and what was achieved. The MaPP website is a very useful resource to learn more about the process, watch a video on "10 Things You Need to Know About MaPP", read stories from the First Nations and the MaPP stakeholder members, as well as a research tool for students. www.mappocean.org

Vocabulary

Resource: the natural wealth of a "place" which can be living or non-living.

Sustainable: the ability to be supported or maintained at a certain rate or level and creating a long-term ecological balance. It is not being harmful to the environment or depleting natural resources.

Stakeholder: a person with an interest or concern in something.

Name: _____

5.1: Perspectives on the Great Bear Sea

PART ONE

My definition of a stakeholder...

After talking with a partner, my new definition of a stakeholder...

A stakeholder is...

List different partners and stakeholders in the Great Bear Sea...

PART TWO

Statement: There are plenty of salmon in the Great Bear Sea.

Perspectives:

- People who live in the communities near the Great Bear Sea
- Researchers
- Tourism industry – ecotourism, sport fishers, etc.
- Commercial fisheries

My group has been assigned: _____

Statement... Agree or Disagree? Where on the line will you be?

Agree ----- **Disagree**

Perspective: _____

Our position...

Why...

Your thoughts on where the other groups sit on this statement:

Other group _____

Agree ----- **Disagree**

Other group _____

Agree ----- **Disagree**

Other group _____

Agree ----- **Disagree**

Explain why different groups could have different positions on this statement.

What is your plan to support your position?

What else do you want to know or need to consider in order to support your position?

PART THREE

Our final grouping...

Agree ----- **Disagree**

Support for your position...

Did your position on the line change? Explain.

PART FOUR

What recommendations does your group have to conserve salmon and the Great Bear Sea that could be passed along to the decision-makers?

5.2: Traditional Knowledge

Doug Neasloss – *Chief Councillor, Kitasoo/Xai'xais Band Council & Resource Stewardship Director, Kitasoo/Xai'xais Integrated Resource Stewardship Authority*

This is a passage from an interview with Doug Neasloss talking about some of changes to the resources that have been noted and shared.

"We've watched a lot of those resources dwindle over the last number of years. Partly because of mismanagement, and people coming in and harvesting too much. And, you know, in my lifetime, we've witnessed huge declines. Everything from abalone. Abalone used to be a once abundant shellfish in our territories. And the Elders talk about it ... that is was some areas they said you couldn't even touch the ground there was so many abalone. They were all over the place. Today, you probably will never see an abalone. In my lifetime I've never actually tried an abalone in the last probably 20-something years now because they've all just been wiped out. You know, the commercial fishery came in and harvested way too many and they just haven't been able to come back in numbers. With things like abalone you need large numbers because they're broadcast spawners and so the population just hasn't been able to come back and do that.

Same thing with salmon. I listen to the historical numbers of salmon. Some the Elders will say some of the rivers and the estuaries would be full of salmon. They said some rivers were just plugged wall to wall with salmon. And I looked at the historical numbers of them, and there were about 80,000 fish in some of those systems. Today, we are down to about 5 or 6 thousand in some of those same rivers.

So, you know, I think there's been way too much over harvesting. I think with things like global warming, there's a number of different impacts that are effecting salmon. So, I think we have a long way to go."

Name: _____

5.3: Self and Group Assessment

Self-Assessment

Please rate **yourself** on the activity:

1 = I could do better.

2 = I did okay.

3 = I did a great job.

I shared my opinions in discussions	1	2	3
I allowed my group members to share their opinions.	1	2	3
I remained focused on the task.	1	2	3
I did my fair share of the work during the activity.	1	2	3

Please comment on the following:

One thing I will work on in the next group activity is...

One wish I have for the next group activity is...

Group Assessment

Group Members: _____

Please rate **your group** on the activity:

1 = My group could do better.

2 = My group did okay.

3 = My group did a great job.

My group members participated in the activity.	1	2	3
My group remained focused on the task	1	2	3
My group worked well together.	1	2	3
We all did our fair share of the work.	1	2	3

Please comment on the following:

One thing my group did well was...

One thing my group could work on is...