

# Lesson 4: Sustainable Resource Planning for the Future

**Overview:** In thinking about sustainable resource planning, students will explore the concept of collaborative decision-making and consider some of the processes and challenges that may be encountered when gathering input and making decisions about important issues. Through a variety of film clips, students will look specifically at how partners and stakeholders are planning for the future of the Great Bear Sea through the Marine Planning Partnership, the development of Marine Protected Areas, and monitoring/stewardship activities.

**Suggested Time:** 2 sessions of 75 minutes each

## Materials and Resources:

- Computer, projector and screen
- Chart paper and markers
- Teacher Background – Lesson 4
- Lesson 4 Film Clips:
  - Planning Part2 (13 mins)
  - Collaborative Decision-making (10 mins)
  - Protected Areas Overview (2 mins)
  - SEAS1 (3 mins)
  - SEAS2 (3 mins)
  - Coastal Guardian Watchmen (12 mins)
- 4.1 Great Bear Sea Guided Viewing Questions

## Learning Objectives:

Students will:

1. Examine how diverse worldviews influence individual and societal interactions with the environment and decision-making.
2. Explore a model of collaborative planning and governance with the Marine Planning Partnership for the Great Bear Sea.
3. Explore local marine models of monitoring, conservation and stewardship.
4. Explore how marine planning may contribute to a sustainable future.

## Lesson Context

Students will engage with the broad concept of collaborative decision-making, including partner and stakeholder engagement, working with different perspectives, and the challenging process of making evidence-informed decisions around issues with wide impact. Students will begin to see that collaborative decision-making in general can involve drawing on background knowledge and experience, voicing opinions and rationales for those opinions, thinking about personal and collective consequences, listening carefully and respectfully to others, and sometimes, being willing to compromise for the sake of group and/or identified needs.

While it may have come up in discussion in prior lessons, students are also introduced formally to the Marine Planning Partnership (MaPP), and how 18 First Nations and the Province of British Columbia have partnered as part of an innovative process to plan for sustainable management of the Great Bear Sea through the establishment of four area-specific marine plans and a regional planning framework. Students consider some of the various perspectives involved in both marine and land-based decision-making in BC. Additional film clips are also provided which give an overview of Marine Protected Areas (MPAs) and examples of monitoring/stewardship practices currently underway in the region.

## Learning Activities

### Part A

#### Activity 1: Collaboration and Collective Decision-Making (25 minutes)

1. Share the following scenario with students:
  - You are preparing an emergency pack for the classroom. But there's a catch – only 4 items can be packed. What 4 items do you choose?
2. In small groups, have students discuss the scenario and decide on 4 items as a group. You have to come to a decision and form one list to be presented to the Emergency Preparedness School Committee.
3. Have groups share their lists and reasons for selecting the items.
4. Facilitate a class discussion about how groups formed their lists. Consider the following questions:
  - Describe the process you used to come to a decision on the 4 items. For example, did you start with a big list and then work down to only 4 items?
  - What was informing your decision-making? How did you know what should be on the list and what was ok to let go?

- Where some voices in the group 'stronger' than others? How did you deal with this?
- What were the benefits and consequences to having to come to a shared decision?

## **Activity 2: Great Bear Sea Stakeholders (20 minutes)**

1. Explain that in the example in Activity 1, we all had a vested interest in the outcome – survival. Coming to a shared decision on other issues – especially those with competing ecological, social, cultural and economic impacts – can be more challenging.
2. Have students think about this in relation to the Great Bear Sea and decision-making for the regions. As a class, brainstorm a list of stakeholders (a person with an interest or concern in something) in marine planning for the Great Bear Sea. Record the list on the board.
3. As a group, discuss how different stakeholders may have different perspectives (for example, commercial interests vs personal interests). Consider some different processes for making final decisions (for example, in Activity 1, how might the Emergency Preparedness School Committee go about looking at all the recommendations and making a final decision).

## **Activity 3: Great Bear Sea Collaborative Decision-Making (30 minutes)**

1. Explain that as a class, students will view a portion of the film that shows the ways that groups in BC are coming together to collaborate around the future of the Great Bear Sea (see **Teacher Background – Lesson 4**).
  - The Marine Planning Partnership (MaPP) is a co-led partnership between First Nations and the Province of British Columbia. These partners in turn then engaged stakeholders in each region to gain their input (perspectives/opinions) in informing the development of regional plans.
  - Whereas marine planning is taking place all over the world, the manner in which the Great Bear Sea marine plans are being developed – through the MaPP process – is very unique. This collaborative government-to-government planning process is innovative and globally significant; there is currently no other country where a marine plan has been developed by Indigenous and provincial governments.
  - Provide students with some context around the difference in regulation in Canada for marine/oceans and land.

2. Provide each student with a copy of **4.1 Great Bear Sea Guided Viewing Questions** and review it together as class.
3. Watch the film clip **Planning Part2**. If time permits, suggest that students watch closely the first time, and then again a second time to make notes.
4. Provide students with some time to complete the questions on their own. These notes will be helpful for students when building their projects in Lesson 5.
5. Before moving onto Part B, you may want to provide students will time to review the MaPP website ([www.mappocean.org](http://www.mappocean.org)) and have them watch the *10 Things You Need to Know About MaPP* video. Have them submit a reflective response, noting why they think the MaPP is unique.

## Part B

### Activity 1: Marine Protected Areas and Marine Reserves (35 minutes)

1. Recall the clip from last class regarding the MaPP. As a large group, discuss what makes the MaPP so unique:
  - Co-led partnership between the Province of British Columbia and 18 First Nations.
  - Informed by scientific, traditional and local knowledge.
  - Gathers input and advice from stakeholders, scientists and the general public.
  - First Nations and the Province of BC are being pro-active in planning local needs, and considering different types of needs (human well-being, ecological integrity and governance). Considering multiple perspectives.
  - Recognizing the Great Bear Sea as a unique BC natural resource – coming together with sustainability in mind.
2. Explain to students that the next film clip, **Collaborative Decision-making**, will both review some things about the MaPP as well as introduce some new concepts about marine planning. Have them watch for the new concepts and be prepared to discuss them as a class following the viewing. Play the film clip and then consider the following:
  - With so much potential development in the area, marine planning is key.
  - Protection Management Zones were noted – areas that allocate space primarily for conservation purposes – and will eventually become part of a network of Marine Protected Areas (MPAs) in the Great Bear Sea.
  - Other layers of zoning were mentioned:
    - i. *General Management Zones* are areas that allocate space for public, private and community marine uses and are managed using ecosystem management approach.

- ii. *Special Management Zones* are areas that allocate space for high priority or high potential marine uses.
3. Watch the next film clip, **Protected Areas Overview**, and have students record any questions they have about the two. As a class, discuss the distinction:
  - MPAs may be less restrictive than Marine Reserves by allowing for extractive activities like sport fishing, salmon trolling, etc.

## Activity 2: Monitoring and Stewardship (40 minutes)

1. Read out this quote to students, from the end of the **Collaborative Decision-making** film clip:
  - *Rolling out a plan like this is not the end of something, it's pretty much the beginning of it* – Dan Edwards, BC Commercial Fishing Caucus
2. Discuss this as a class. What does he mean by this? What comes next? Note some suggestions on the board.
3. Have students brainstorm what may have to be monitored and enforced in implementing the Great Bear Sea marine plans and in promoting sustainability and stewardship in the area. How do we ensure implementation for generations to come?
4. As a class, watch all or some of the remaining film clips (**SEAS1**, **SEAS2** and **Coastal Guardian Watchmen**) and discuss how formal and informal means of leadership might contribute to sustainability and stewardship. For instance:
  - In what ways are the participants of the Supporting Emerging Aboriginal Stewards (SEAS) program contributing to furthering the marine plans? How does learning about language, culture and tradition contribute to sustainability?
  - Why is it important for the people monitoring the area – like the Coastal Guardian Watchmen – to live in the communities they monitor?
5. In preparation for Lesson 5, have students submit their top 3 questions and/or topics for inquiring more into sustainable development and/or resource management in the Great Bear Sea.

### Extension Ideas

- Have students submit a reflective response to one of the monitoring and stewardship film clips addressing the following question:
  - What is a pressing environmental concern in our local region? How do you think it should be addressed through monitoring and stewardship?
- Engage in a class stewardship activity at a local water source and discuss how stewardship at the local level has impacts at the global level.
- Explore a local example of the development of a marine protected area by researching the Northern Shelf Bioregion MPA Network. See **Teacher Background – Lesson 4**.

### Assessment Ideas

- Formatively assess students' engagement in group work and large group discussion.
- Collect **4.1 Great Bear Sea Guided Viewing Questions** for each student.

## Teacher Background – Lesson 4

In Canada, regulation in relation to environmental issues generally falls within three categories: federal jurisdiction, provincial jurisdiction or a combination of both. Particular scenarios can be quite complicated, but for the purpose of this lesson, it will be helpful for students to make the general distinction that most land issues (as well as land-locked lakes/ rivers) are under provincial jurisdiction, while marine and ocean related issues like fisheries, shipping and navigation are generally under federal jurisdiction. You can find more information on the Parliament of Canada website by searching “Federal and Provincial Jurisdiction to Regulate Environmental Issues” ([www.parl.gc.ca](http://www.parl.gc.ca)).

The Great Bear Sea represents an interesting area where both provincial and federal jurisdiction comes into play. Traditionally, the federal government has 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 sectors when making decisions that will impact the area. As a means of addressing this, the Government of Canada established the Pacific North Coast Integrated Management Area (PNCIMA), in 2010, with the goal of collaboratively developing an integrated marine plan. However, the federal government withdrew from the agreement in 2011.

### Marine Planning Partnership

The Marine Planning Partnership (MaPP) [www.mappocean.org](http://www.mappocean.org) represents an innovative response and approach to the challenge of sustainable planning for the Great Bear Sea for generations to come. The MaPP is a co-led process between 18 First Nations 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. 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 revealed and made public on the MaPP website. According to the BC and First Nations' governments, these plans... “when implemented, will help to create opportunities for sustainable economic development, support the well-being of coastal communities and protect the marine environment.” Ecosystem based management integrates human well-being, ecological integrity and governance as well as considers the effects of ocean use and activity on marine life and coastal communities.

The MaPP plans outline activities and uses for which the province has jurisdiction. For the federal government, which manages shipping and commercial fishing in the Great

Bear Sea, these plans may be tools for establishing a more integrated approach to marine management.

Whereas marine planning is taking place all over the world, the manner in which the Great Bear Sea marine plans are being developed – through the MaPP process – is very unique. This collaborative government-to-government planning process is innovative and globally significant; there is no other country where a marine plan has been developed by Indigenous and provincial governments. 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. 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.*

### **Marine Protected Areas**

Marine Protected Areas (MPAs) are an important tool for protecting ecosystems from overuse and exploitation. MPAs restrict human activity in a protected area of seas, oceans or large lakes for a conservation purpose, typically to protect natural, historic or cultural resources. MPAs allow for fish and marine life restoration, increasing both size and number of species, and protect species in critical stages of the life cycle. MPAs also act as a baseline for research purposes, to judge management processes in nearby areas. To date, Canada has just over 60,000 km<sup>2</sup> of protected oceans and lakes. In June 2010, Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site (3500 km<sup>2</sup>) in British Columbia (in the Great Bear Sea region) was established under the Canada National Marine Conservation Areas Act.

### **Northern Shelf Bioregion MPA Network**

The Government of Canada, Province of British Columbia and 17 First Nations are working together to develop a marine protected area network in the Northern Shelf Bioregion (NSB), which extends from the top of Vancouver Island (Quadra Island/ Bute Inlet) and reaches north to the Canada – Alaska border, in the region of the Great Bear Sea. The Northern Shelf Bioregion Marine Protected Area Network planning process aims to build a network of MPAs that will help to ensure that future generations will inherit the beauty and productivity of our Pacific Ocean. For more information on the Northern Shelf Bioregion MPA Network visit: [www.mpanetwork.ca/bcnorthernshelf](http://www.mpanetwork.ca/bcnorthernshelf).

### **Coastal Guardian Watchmen**

First Nations Guardian Watchmen have safeguarded the health of their territorial lands and waters on BC's coast since time immemorial. Today local Guardian Watchmen monitor the health of the plants and animals that have ecological and cultural importance to their communities. They also monitor the impacts of activities such as commercial and sport fishing, logging, and tourism.

Local Guardian Watchmen programs play a critical role in successful resource management by helping to implement land and marine use agreements and ensuring rules and regulations are followed in their territories.

The Coast Guardian Watchmen Network is an initiative of the Coastal First Nations Great Bear Initiative. Their video – *Eyes and Ears on the Land and Sea* – is provided in this lesson with permission. See their website for more information: [www.coastalguardianwatchmen.ca](http://www.coastalguardianwatchmen.ca).

### **Supporting Emerging Aboriginal Stewards (SEAS)**

Supporting Emerging Aboriginal Stewards (SEAS) Community Initiative is a youth program initiated by First Nation community partners together with TNC Canada. As noted on their website at [www.emergingstewards.org](http://www.emergingstewards.org):

Local programs are designed to engage, develop, prepare and empower Indigenous youth to become the next generation of stewards in their communities and territories. First started in 2009, the SEAS Initiative has supported youth in four communities in the Great Bear Rainforest of British Columbia as well as the Lutsel K'e Dene community in the Northwest Territories. Working collaboratively with TNC Canada, each community partner develops and designs a program uniquely suited to the community's priorities, needs and opportunities for engaging youth in stewardship learning and activities. Programs integrate traditional and cultural knowledge with western science approaches, and typically have both a school component and a summer internship component.

Name: \_\_\_\_\_

## 4.1: Great Bear Sea Guided Viewing Questions

1. Douglas Neasloss (Chief Councillor, Kitasoo/Xai'xais Band Council & Resource Stewardship Director, Kitasoo/Xai'xais Integrated Resource Stewardship Authority) comments "We started working on the marine use planning shortly after [land-based planning]. That's really important, especially for the community because we are such an aquatic based people." Why would marine planning be so important for the Kitasoo and other coastal First Nations communities?

2. The clip introduces the Marine Planning Partnership (MaPP). Describe this partnership in your own words, including what you think "collaborative planning" means.

3. List some of the partners and stakeholders involved with the Great Bear Sea (marine-based) decision-making. Include those not mentioned in the film if you can think of others.

4. Several people in the film clip provide reasons for why the MaPP is important for the Great Bear Sea region. What are some of those reasons? Can you think of other reasons why marine planning is important for BC?