

Lesson 1: Introduction to the Great Bear Sea

Overview: Students will be introduced to the marine area in BC known as the Great Bear Sea, including the corresponding local land-based communities that call this region home, through an introduction to the film *The Great Bear Sea: Reflecting on the Past, Planning for the Future*. Students will identify several key species that make this area one of the most biodiverse in the province and the world, and start to consider the ecological, social, cultural and economic significance of future development in the area.

Suggested Time: 2 class sessions (75 minutes each)

* **Teacher Note:** Throughout this resource, additional materials, several images and colour resources are noted with a * in the materials list. These resources are available on the Great Bear Sea USB, or at www.greatbearsea.net.

Materials and Resources:

- Computer, projector, and screen
- Chart paper and markers
- Lesson 1 Film Clips:
 - Introduction (6 mins)
 - Respect (10 mins)
 - First Nations History Overview - video and audio files (14 mins)
 - Ratfish (4 mins) - *optional*
- Teacher Background – Lesson 1
- 1.1 Interview with Doug Neasloss
- Great Bear Sea MaPP Study Area Map *
- Great Bear Sea MaPP Study Area With Sub-Regions Map *

Learning Objectives:

Students will:

1. Identify the location of the Great Bear Sea and some of the species and resources of the area.
2. Explore the interconnectedness of systems (land and water), and interdependence and interactions between systems.
3. Pose questions about the ecological, social, cultural and economic impacts associated with sustainable resource development.
4. Explore the ideas of stewardship and leadership in planning for the future of marine resources and ecosystems.

Lesson Context

This unit focuses mostly on humans as agents of change on systems. Before starting this unit, it would be helpful to review key concepts like biodiversity, the interdependence of all living things, systems and sustainable ecosystems, as well as the complexity of such systems. Students will then be prepared to look more closely at sustainable resource management and planning through the lens of the Great Bear Sea.

This lesson introduces students to the area known as the Great Bear Sea – an ecologically biodiverse and important marine area for British Columbia. They will be introduced to the four sub-regions of the area (Central Coast, Haida Gwaii, North Coast, and North Vancouver Island) and consider the communities and species that call this diverse ecosystem home.

Students will access prior knowledge through developing species food webs and considering how all living and non-living things are interconnected – marine and land-based. They will also listen to a First Nations story about the need to respect all things as a means of working toward sustainability. They then pose questions about the ecological, social, cultural and economic impacts of future development in the region, and how this development might be planned to support sustainability in a more broad sense.

Learning Activities

Part A

Activity 1: The Region Known as the Great Bear Sea (40 minutes)

1. Project the **Great Bear Sea MaPP Study Area Map*** on the screen and ask students if they can identify the area. Explain to students that this region is known as the Great Bear Sea and point out the demarcation line on the map, with the region spanning from the Alaska boarder to Campbell River on Vancouver Island. Engage students in a discussion about the region with some of the following questions:
 - Have you ever lived, visited or travelled through any of the areas in the region? Name some of the places that you are familiar with in the region.
 - What do you think may be the driving industries in the region?
 - Students may be familiar with the Great Bear Rainforest, including the recent steps to protect the area. What have they heard about the recent agreements to protect the area known as the Great Bear Rainforest?
 - Why do you think this region may be important to BC and Canada?
 - Do you think you are impacted by what happens in the Great Bear Sea? (Depending on your geographic location, this may be more or less overt. Encourage students to consider that coastal waters of BC have impacts for areas all over the province and beyond.)

2. Share the following quote with students, explaining that this is a comment made by a person living and working in the Great Bear Sea region, specifically the Heiltsuk Nation, which is in the region of Bella Bella (you may want to point to this area on the map).
 - *Everything we eat, whether it's inter-tidal, whether it's bottom fish, whether it's herring, whether it's herring spawn, whether it's salmon – everything comes out of that ocean. It's a lifeline. It's a lifeline for our people.* - William Housty, Chair, Heiltsuk Integrated Resource Management Department
3. In pairs, have students brainstorm a list of species they think are present in the Great Bear Sea region (both marine and land). Have them then star the species they think might have the biggest impact on the "lifeline" that is referred to in the quote. Discuss as a class.

Activity 2: Introduction to the Film (35 minutes)

1. Let students know that over the coming days, the class will be exploring more about this region, and its importance to BC, through film exploration. Introduce the film *The Great Bear Sea: Reflecting on the Past, Planning for the Future*, explaining that it is a film focusing on this particular region in BC and how people are coming together, amid growing demands on BC coastal waters, to plan for the future of the region. First Nations and the Province of BC have come together to work on regional marine plans to govern the area.
2. Project the **Great Bear Sea MaPP Study Area With Sub-Regions Map*** and as a class discuss the four sub-regions (Central Coast, Haida Gwaii, North Coast, and North Vancouver Island).
3. As a class, watch the **Introduction** film clip and have students add to their species lists. You may want to show the clip a second time.
4. After viewing, discuss the new species that were mentioned in the clip (species noted in the film include: salmon, dolphins, porpoises, humpback whales, orcas, wolves, spirit bears, sea prunes, cucumbers, red urchins).
5. In preparation for the next class, divide students in 6 small groups and explain that next class, groups will draft a food web for a particular species in the Great Bear Sea. Provide six options: salmon, grizzly bear, orca, wolf, herring, red urchin. You may wish to have students research their species independently to be prepared to share learning with their group.

Part B

Activity 1: Food Web Exploration (45 minutes)

1. Have the students form their species groups and provide each group with chart paper and markers. (Note: this activity could also be done digitally, using a program such as Padlet or Stormboard.) Explain to students that they should work together to build a food web including their chosen species. The webs do not need to be perfect – they should include best guesses when they are not sure. Provide the following instructions:
 - Food webs show the transfer of energy from organism to organism. Draw arrows pointing from the producer (prey) to the consumer (predator). Try to come up with as many relationships as possible, using the chosen species as a starting point. Use words and/or drawings.
 - As another layer of the food web, consider the following questions as a group:
 - i. What are some of the external forces impacting the species? (habitat destruction, fishing, etc.).
 - ii. If the species were to become extinct, what might be the impact to other species?
2. Time permitting, have one group join with another, and compare and contrast food webs. Have the groups consider how, if at all, their species impact one another.
3. Post the webs around the room and reserve time for groups to share their work.
4. Engage in a large group discussion, having students share their observations. Some possible prompting questions may include:
 - What is one new thing you learned as a result of working in groups or reviewing all the food webs?
 - How is life in the Great Bear Sea connected? Provide some examples.
 - Do you think resource management in this area would be important? Why?
 - If it hasn't come up already, stress the biodiversity – the variety of life in this region – and that the survival of all living things on Earth depend on this biodiversity. If one species is in threat, this impacts a series of other species (and so on). All life is interconnected.

Activity 2: Underwater Big House, Story of the Gitnuganaks (30 minutes)

1. Explain to students that the Great Bear Sea is home to many different First Nations who have lived in their territories for thousands of years, having close relationships with the land and sea (see the **Teacher Background – Lesson 1**).

2. Introduce the **Respect** film clip, Underwater Big House, Story of Gitnuganaks told by Vernon Brown, Kitasoo/Xai'xais Nation. Watch/listen to the story as a class.
3. After viewing, have students work in pairs to discuss the story and the moral, and then discuss as a class, reiterating the following:
 - We depend on marine and land based resources for survival. Management of these resources is important for our future health as a planet.
 - Healthy and sustainable systems support biodiversity. Planning for sustainability is key to a healthy and prosperous future.
 - In planning for resource management, there are ecological, social, cultural and economic implications to consider.
4. Have students develop 3 – 5 questions that they now have in thinking about healthy and sustainable resource planning and management, considering the ecological, social, cultural and economic impacts of such planning. These questions may help guide students to an area of research for further study in later lessons.

Extension Ideas

- Provide students with **1.1 Interview with Doug Neasloss** (or use the film clip or audio files with **First Nations History Overview**) describing the history of the First Nations in the Central Coast region of BC as told by Doug. Have students write a reflective response addressing one of the comments/issues that Doug raises.
- If students are interested in the ratfish, show the **Ratfish** film clip for further discussion.
- Have students research a cultural element of one of the species of the Great Bear Sea, showing the relevance to a particular group or area, particularly with regard to First Peoples culture.

Assessment Ideas

- Formatively assess students' engagement in group work and large group discussion.
- Use the food webs and associated questions as formative assessment of students understanding of biodiversity and interconnectedness.
- Assess the reflective responses.

Teacher Background – Lesson 1

The Great Bear region of British Columbia's north coast is one of Canada's unique ecological treasures. It is home to islands, wild rivers, cold-water seas, a rich marine ecosystem, and one of the world's last intact temperate rainforests. The Great Bear region is interconnected between the land and the sea and truly is an ecosystem that is unlike anything else in the world.

The Great Bear Sea covers a large area from the northern tip of Vancouver Island to the Alaska border. It can be divided into four sub-regions: North Coast, Haida Gwaii, Central Coast, and North Vancouver Island, as described in the film. The Great Bear Sea is home to many species of living organisms and many different kinds of habitat. For example, 20% of the world's remaining Pacific salmon are in this area, moving from the rivers to the sea and returning to spawn in their life cycle. It is home to two species of bears including a special type, or sub-species, of black bear called the spirit bear that lives nowhere else on Earth. Many types of marine mammals such as sea otters, dolphins, porpoises, humpbacks and killer whales call this area home or migrate through the waters. The area contains globally significant populations of breeding seabirds as well as important foraging habitat for trans-equatorial migrants that spend the summer in BC when it is winter in Australia and New Zealand. The area also is part of the Pacific Flyway and each fall and spring, hundreds of thousands of shorebirds, ducks, geese and other birds fly between the breeding grounds in the Arctic and their wintering areas in Mexico and South America, stopping at the nutrient-rich estuaries and mud flats to refuel and regain body fat for the long journey. The Great Bear Sea contains important habitats for threatened and endangered species, and supports a rich, complex food web ranging from tiny pteropods to the giant whales – this is one of the most biodiverse temperate regions of the world.

The Great Bear region is the traditional, ancestral and unceded territory for many First Nations groups which have depended on the resources of the land and sea for thousands of years. This area is also very rich in culture, with various species, artefacts and landscapes holding great significance to the communities that call this area home. The Great Bear Sea provides employment for many in the region in a variety of industries such as fishing and tourism. At the same time, there are many threats to this region including overfishing, increased marine traffic, oil spills and development. The biodiversity of the region, the fact that so many communities depend on this area for sustenance, and the increasing global competition for natural resources and waterways, provides a good framework for understanding the importance of ecosystem protection and planning for the future.

The year 2015 marked an important milestone for shaping the future of Canada's North Pacific Coast and the Great Bear Sea. A co-led partnership between the Government of British Columbia and 18 First Nations – called the Marine Planning Partnership (MaPP) – developed marine plans for the purpose of guiding marine management and the future

of the Great Bear Sea region. On April 27, 2015 the marine plans for the four sub-regions were publicly announced. This collaborative planning process is extremely innovative, and can be used as a model for considering community engagement around planning for a sustainable future.

The Great Bear Sea: Reflecting on the Past, Planning for the Future explores the marine planning process from the perspective of the four sub-regions (North Coast, Haida Gwaii, Central Coast, and North Vancouver Island). The following First Nations* in each sub-region were involved in the MaPP:

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.*

1.1 Interview with Doug Neasloss

The following is an excerpt from an interview with Doug Neasloss, Chief Councillor, Kitasoo/Xai'xais Band Council & Resource Stewardship Director, Kitasoo/Xai'xais Integrated Resource Stewardship Authority. Doug shares some of the history of the First Nations in the Central Coast region of BC.

Doug: My name is Doug Neasloss. I am from a small community called Klemtu, which is right on the central coast of British Columbia, and it is home to the Kitasoo/Xai'xais Nation. I have a few different titles. I work as a Marine Planning Coordinator. I work as a Resource Stewardship Director, with land and marine stewardship and a whole bunch of other things that come out of that as well. I also work as the elected Chief of the community, and my background's mostly been in tourism for the last 14 years.

To me, I think, this is one of the most special areas in all of the coast. I think the Great Bear Rainforest is definitely a very special and unique area. A place that still has intact old growth forests. We live in the largest intact temperate rainforest on the planet. It's one of the last strongholds you'll get for bears and other wildlife that are in the region. And it's just full of life. And I think that's something that's really neat. It still has the aquatic resources. It still has a lot of the land animals and I think there's not too many places on the planet that have what we have here and that's what keeps me here.

Karen Meyer (Great Bear Sea film maker): Taking a look back, talk about things that had a really significant impact on First Nations.

Doug: I think there's been a bit of a rough past when it comes to First Nations, I mean, I think just not long ago, whether it's 150 years to 200 years there was nobody else here, it was just First Nations communities, you know, in my area here we have two different nations from Klemtu. We have the Kitasoo, who are Tsimshian and they're the southernmost Tsimshian group and lived on the islands and then we have the Xai'xais people who lived on the mainland and in both Nations moved in the Klemtu in the 1850's, but prior to that, people lived, you know, quite nomadic lifestyles, and they followed the food resources in all of these different areas. At the time our cultures were very complex. It wasn't just as simple as following food. People had very complex governance structures, they had very complex relationships with different families. We had clan systems that distinguished different family groups and who had access to different areas based on different seasons. So it was a really complex relationship.

Around 1884 the government at the time decided to ban the Potlatch, which was the Potlatch in our community, our culture was the glue that held everything together. The singing, the dancing, the storytelling, the governance, coming-of-age ceremonies, passing of chieftainship, passing of copper shields. All those things were really important in our culture and in our community. And people used to prepare years in advance for Potlatch. So if I was going to host a Potlatch, some people would prepare 4 or 5 years in advance. But the Canadian government wanted to assimilate First Nations people into

the mainstream society so at the time they banned the Potlatch in 1884 to 1951. And the same thing happened in other regions. In the U.S. it happened in 1884 to 1936. But 1884-1951 during the banning of the Potlatch, it was illegal to Potlatch. And if you were caught potlatching, you were arrested for doing that.

So at the time the government sent what they called the "Indian Agent," and it was a person up here to monitor the activities of the local communities. And so everyone was paranoid about potlatching. People didn't want to Potlatch. But it was such an integral part of our culture and our community, people decided to take it underground in a way and Potlatch in secret. So what people used to do is they used to take the regalia and put it in the cedar bentwood boxes to make it look like it was a burial box, but it was actually their storage area for all of their regalia. And they used to paddle out to this one place we call it Dis' Ju, and it's a gathering place for people. And this Big House is hidden in the forest, you can't tell it's there going by in the boat, and people used to paddle out there in the roughest times of the year to go and Potlatch, so the Indian Agent wouldn't follow them out there.

Unfortunately around the early 1900s, there were so many families that did not make it back. A lot of families died trying to go out and Potlatch in secret. So by the early 1900s Klemtu stopped potlatching altogether. And that was a huge loss for the culture. Again, because that was the glue that held everything together. And that was just, you know, one of the reasons why we, during that time, we lost a lot.

Karen: What are some of the key things that your Elders tell you about what life was like here pre-contact?

Doug: Yeah, I've sat down and had a lot of discussion with our Elders about life, and even, you know, we live in a pretty isolated area, so we didn't have actually a lot of contact until quite late. The first contact we had was actually Captain Vancouver. I believe that was in 1793, when he came up and it was what people, the Elders always talk about how nomadic the lifestyles were. They talked about the seasonal camps, and the permanent camps. They said the food harvest would start in the wintertime. It would start with the clams and cockles in the winter. And then early spring, around March, the halibut would start to come in and they would start harvesting halibut. And then once the halibut was finished, they would start to move over to the herring and the herring eggs. And that was huge. That was probably one of the most important foods in our community, because it wasn't just used for food consumption, but it was also used for trade. And there was a huge trade routes along the Coast amongst different families up and down the coast. So Klemtu used to harvest the herring eggs and trade it with the Bella Coola people [Nuxalk] and also the Kitamaat people [Haisla], and they used to trade for eulachon grease, and that was huge because we didn't have eulachons in Klemtu area, and then once that was finished, we'd move over to seaweed in May, and right after seaweed was finished then you would go on to salmon, in particular sockeye salmon, and then later on in the summer, late summer, you would start to get all the salmon, so the coho, pink, and chum would start to come in.

So people were very dependent on all of these resources, and especially because it was such an isolated community, those aquatic resources are extremely important because food costs here in the community are so expensive. People, you know, depended on those, and we had different camps based on different things. Like Marvin Island is a herring camp. People just went there to go and harvest herring eggs. And while they were there, they would dry the herring eggs, they would dry the halibut, because a long time ago there were no refrigerators or freezers, so they would dry everything. Everything was sun dried. Or they would smoke it. And that's how they'd preserve things.

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 in 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 of 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.

Karen: What happened as a result of banning of Potlatches and other events, post-contact?

Doug: Well, I think the loss of culture during the ban of the Potlatch, I mean that was huge. I mean we had, you know, very strict ceremonies for different seasons. The return of salmon. The return of eulachons. The return of herring. The return of all these separate things were celebrated in a way, but also it was a ceremony to let the community know what time of the year it was, and food harvesting, I think there was traditional stories that were lost during that time and traditional stories that taught lessons of respect for certain resources and you know I think the governance structure, I think there was a lot that was lost, you know, songs and dances, and songs in our culture was a way of documenting an event, you know, that was going on so it wasn't just a simple song it had some meaning to it, and it came from a certain area, and it belonged to a certain family.

The passing of chieftainship. You know we have a very complex hereditary chief system in our community. So hereditary chiefs, you weren't just born a hereditary chief, you were groomed to be a chief, and you know the rule of the hereditary chief is you're there to steward, you had a responsibility to take care of a certain area, and so if you were a chief you would carry title to a certain inlet, or a certain estuary, and it was your responsibility to make sure that what was going on there was sustainable and "chief" in our language means "to serve." It means that you're there to maintain order of a house. So we had chiefs that had ... they're responsible for a Raven House. And that house, they had to make sure people were keeping the songs alive, keeping the stories alive. You know, harvesting the different berries, or harvesting deer, and salmon, and things that hunters and gatherers harvested.

But they would also grant permissions to certain people to access certain areas, and that was all based on sustainability. So you had to make sure that the stocks were there, and if they weren't there, they would deny access to certain areas.

And we also had very complex arranged marriages as well, so if you wanted to access an area, today people just go on there and fish in an area. A long time ago it wasn't like that. You had to get very strict permission or it was often done through arranged marriage. So, if I was a chief and I wanted to access some else's area, you'd do an arranged marriage, and I would have access to their salmon, they would have access to my berries. So it wasn't just anybody that could go in. And that could get you in big trouble, I think, a long time ago if you just waltzed in there today and go and access certain areas. So I think that system, the hereditary system they used, a lot of that was lost during that time. Luckily we do have some Elders that still have some of that knowledge.

You know, I think the appetite of the time was really to assimilate First Nations people to mainstream society. And it started off with the governments and the church at the time banning things like the Potlatch and I guess just before the Potlatch, disease ran fairly rampant in our communities in around the 1860s.

I think at the time there was this huge movement to assimilate First Nations people into the mainstream society, so banning the Potlatch was a huge step in terms of trying to assimilate and get First Nations people to forget their culture, but prior to the banning of the Potlatch came disease. So disease ran rampant in all of our communities and we estimated we had a population of about 3,500 to 4,000 people out in KITASOO Bay alone and disease swept through there around the 1860s and there was a smallpox epidemic that killed off quite a bit of the communities. In some cases it was like 99% of the communities. So we have some stories where one or two people survived the smallpox epidemic. Also around 1913, there was also the flu epidemic as well, and that decimated, again, quite large populations. I heard stories from our Elders where so many people died that they didn't really have time to give them a proper burial. It was just dig a big hole, put them in the ground, and hopefully you don't get sick. So I think those introduction of diseases played a huge role and a lot was lost.

So not just did we have to deal with smallpox and the flu epidemic, and the banning of the

Potlatch. Communities were still around in the early 1900s so the government started to introduce Reserve systems. They started to take First Nations nomadic people and started to push them all to these small parcels of Reserve and basically said "You're not going to live in these areas anymore." And they sort of pushed these people into small little blocks. So, my community was settled here in Klemtu and this is about 100 acres here in the community. It's not very big, but our community, our territory is massive because we followed all the foods and that's what our territory is based on today.

You know, unfortunately, now if you look at our system now, we only have about, we have less than 1% of our land base, if you were to go by their reserve system today. Although my people have always said they never signed a treaty. They've never surrendered rights and titles, so they've always said "this is theirs" and it's based on the chieftainship that's there.

So, it wasn't just all of those things – disease, the banning of the Potlatch. Another major event was residential schools. In the 1930s the government created these residential schools and basically, you know, we have some of the literature from the churches that said the banning of the Potlatch wasn't working – people were still speaking the language, people were still practicing their culture, whether that was being done in secret. So they needed some ways to really try and get people to forget their culture, forget their language, and become, to be assimilated into mainstream society, so the idea of residential schools was created.

There were boats that came into the community in the early 1930s and basically scooped up all the kids in the community and people had no choice, and they had to go and they were taken on the boats and they were taken out to schools, and they were spread out all over. A lot of people from Klemtu went down to Vancouver Island. And around Alert Bay area. Some people went down to Port Alberni. Some people from Klemtu went as far over as Edmonton in the 1930s. Some people went to Vancouver, to the mission school that was there. And the idea was to separate young people from their parents so that oral tradition wasn't passed on. And people, if you listen to the Elders who have gone through these residential schools, they were strapped for speaking their language. They had to cut their hair a certain way. The food quality wasn't good and there was a lot of other things that went on in the background that were not the best things to happen to young kids. And that really changed a whole generation of kids, because now you take a bunch of kids, you put them in these residential schools so that that love you get from your parents was not passed on throughout families and that had a trickle down generation, we still feel the effects today of that generation because some parents grew up without the parenting skills that you would learn from your parents.

Some people grew up with no love and that really affected households, families and communities, and so I think it's my generation, kind of the first generation, that are fortunate and hasn't had to deal with all of that stuff now, and I think things are a bit different today than they were back then. So I think you're going to start to see a bit of a resurgence of stewardship and I think you're going to get this new generation that's

going to come up and start to reassert their stewardship responsibilities, reassert their authority as hereditary chiefs, as owners, or stewards of the land. And I think that's something that we want to be able to work with provincial and federal governments. And we want to stop the mismanagement of these resources and we want to work together and somehow come out with some sort of strategy to best take care of these areas.