Exploring the Great Bear Sea
Social Studies Grades 11 & 12
Acknowledgements

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# Table of Contents

Acknowledgements ..............................................................................................................2

Introduction ..........................................................................................................................5

The Great Bear Sea Film ......................................................................................................5

Marine Planning Partnership (MaPP) .................................................................................6

First Peoples’ Perspectives & Indigenous Knowledge .......................................................8

Curriculum Development & Contributors ..........................................................................9

Resource Overview ...........................................................................................................11

Curriculum Connections ....................................................................................................13

  Social Studies Curriculum Connections Grade 11 ............................................................14
  Social Studies Curriculum Connections Grade 12 ...........................................................16

Lesson 1: Introduction to the Great Bear Sea .................................................................19

Lesson 2: Collaborative Decision-Making .................................................................29

Lesson 3: Collaborative Research ...................................................................................39

Lesson 4: Mock Regional Planning Meeting .............................................................55

Lesson 5: Planning for the Future of the Great Bear Sea ............................................73

Appendix A: Interview with Doug Neasloss .................................................................79

Appendix B: Indigenous Knowledge ..................................................................................85
Introduction

The Exploring the Great Bear Sea Elementary and Secondary Curriculum Resources are based on the film The Great Bear Sea: Reflecting on the Past, Planning for the Future, by Green Fire Productions, and can be used to engage students on an inquiry-based, educational journey through the Great Bear Sea. The Great Bear Sea is a new name given to the North Coast of British Columbia (BC), an area that extends from Campbell River on Vancouver Island to the border of BC and Alaska. This region of British Columbia's coast is one of the richest marine ecosystems in the world, has enormous cultural significance to the people who live here, and contains important resources for BC's economy. It covers a large area – 103,000 square kilometers in total – and extends from the high tide line to the edge of the continental shelf. In an effort to manage existing uses and plan for the future, coastal communities, local government, and more than 10 marine sectors participated in a planning process with 18 First Nations and the Province of British Columbia, a government-to-government partnership to create marine plans and ensure this region is sustained for future generations.

These resources include an elementary cross-curricular unit for Grades 4-7 and secondary units for Social Studies Grades 11 & 12 and Environmental Science Grades 11 & 12. Using film segments, research data, local knowledge and place-based stories, the Great Bear Sea curriculum explores themes such as traditional and local knowledge, collaborative science, marine planning, biodiversity, sustainable resource management and marine stewardship. All resources are connected to the revised BC curriculum and include lesson plans, supplementary resources and film clips to support classroom learning.

The Great Bear Sea Film

The film, The Great Bear Sea: Reflecting on the Past, Planning for the Future, by Green Fire Productions, is a journey through the Great Bear Sea region, home to First Nations for thousands of years. The film explores this unique area – a wild expanse of ocean where whales, wolves, bears, fish, seabirds, other marine life and humans thrive in rich coastal ecosystems. The Great Bear Sea is also a place where worlds collide – a place full of historic conflicts and looming battles over ocean resources. Now 18 First Nations and the Province of British Columbia have crafted marine plans for the Great Bear Sea to both protect their home and to build sustainable coastal economies through the Marine Planning Partnership (MaPP). Through the film, we meet people and communities along the coast of BC who are working to implement BC’s marine plans.

Marine Planning Partnership (MaPP)

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 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 released 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.”

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 Great Bear Sea: Reflecting on the Past, Planning for the Future* explores the marine planning process from the perspective of the four sub-regions. The 18 First Nations* working on the MaPP plans 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.*
First Peoples’ Perspectives & Indigenous Knowledge

The Great Bear region is the traditional, ancestral and unceded territory for many First Nations that have called this area home and have co-existed with the resources of the land and sea for thousands of years. First Peoples in this region have developed a vast body of knowledge over time – and they continue to develop this knowledge – around the land, sea, resources and how humans both impact and are connected to nature.

The film presents the perspectives of some of the diverse First Peoples of this region, and particularly their connection with place – with the land and sea – and their unique knowledge connected to their environment and territories. All perspectives shared were granted with permission, and in collaboration with individuals interviewed in the film. There are also a number of supplementary materials included in the Exploring the Great Bear Sea Curriculum Resources that were provided with permission from various First Nations. Throughout the resource, you will see these cited appropriately.

This Indigenous Knowledge forms the basis of the film and the Exploring the Great Bear Sea Curriculum Resources. Before beginning this unit, it is important to review the following:

- **Appendix A: Interview with Doug Neasloss** (Chief Councillor, Kitasoo/Xai’xais Band Council & Resource Stewardship Director, Kitasoo/Xai’xais Integrated Resource Stewardship Authority) sharing some of the history of the First Nations in the Central Coast region of BC.

- **Appendix B: Indigenous Knowledge** (Source: Science First Peoples Teacher Resource Guide © 2016, First Nations Education Steering Committee and First Nations Schools Association. Used with permission from the First Nations Education Steering Committee Society).

- The full-length version of *The Great Bear Sea: Reflecting on the Past, Planning for the Future* film (75 minutes), so you have an understanding of the context and geography of the perspectives shared in individual film clips. The full-length film is available at www.greatbearsea.net or on the Great Bear Sea USB Drive.

Individual lessons will also provide contextual and background information to support the teaching of this material.
Curriculum Development & Contributors

Curriculum developers, Sarah Lockman (B.Kin, B.Ed., Masters in Cultural Studies and Critical Theory) and Jennifer Buffett (B.A., B.Ed, Masters of Science Communications) have worked in formal and informal educational settings, including elementary, secondary and post-secondary classrooms, non-profit organizations, municipal and provincial educational organizations in BC and Ontario. Together, they bring over 30 years of curriculum development and teaching experience to projects, and work together to create innovative approaches to meeting outcomes and deliverables. They specialize in innovative approaches to hands-on, inquiry and place-based learning, and work with students, teachers and organizations to develop relevant, engaging learning resources and environments. Contact them at: learninginplace@gmail.com.

There are a number of resources included in this curriculum that were provided by individuals or organizations for use in this resource. Please note these resources are not available for use or publication outside of the classroom. Thank you to the following contributors for sharing these resources:

Bear Data and Bear Identification Information
Spirit Bear Research Foundation

Bear Witness (film clip)
Bears Forever - a project of Coastal First Nations and the Central Coast First Nations Bear Working Group

Biographies

• Karen Anspacher-Meyer - Executive Director, Green Fire Productions
• Vernon Brown - Data & Referrals Coordinator Kitasoo/Xai’xais Integrated Resource Stewardship Authority
• Jenn Burt - Doctorate in Resource Management – Marine Ecology Simon Fraser University
• Rosie Child - Operations Manager and a Research Technician for the Spirit Bear Research Foundation
• Molly Clarkson - Marine Communication and Technical Support Officer
• Alejandro Frid - Science Coordinator/Ecologist Central Coast Indigenous Resource Alliance
• Kira Krumhansl - Postdoctoral Researcher at Simon Fraser University and Hakai Institute
• Doug Neasloss - Chief Councillor, Kitasoo/Xai’xais Band Council & Resource Stewardship Director, Kitasoo/Xai’xais Integrated Resource Stewardship Authority
• Dan Okamoto - Postdoctoral Researcher, Simon Fraser University
• Chantal Pronteau - Guardian Watchman & Researcher
• Trevor Russ - Vice President, Council of the Haida Nation
• Markus Thompson - Masters of Resource in Environment Management Simon Fraser University

Coastal Guardian Watchmen - *Eyes and Ears on the Land and Sea* (film clip)
Coastal Guardian Watchmen Network

**Collaborative Research**
Alejandro Frid, PhD, Science Coordinator, Central Coast Indigenous Resource Alliance

**Cover photo (bear) by Doug Neasloss**

**Eelgrass** (film clip)
Florian Graner, Sealife Productions

**Gwaii Haanas Legacy Pole** (film clip)
Parks Canada and filmmaker, Nate Jolley

**Haida Marine Seasonal Round and Ocean & Way of Life brochure**
Council of the Haida Nation – Marine Planning Program

**Ha-ma-yas Marine Plan (excerpt)**
Member Nations of the Nanwakolas Council

**Indigenous Knowledge (Appendix B)**
Source: Science First Peoples Teacher Resource Guide © 2016, First Nations Education Steering Committee and First Nations Schools Association. Used with permission from the First Nations Education Steering Committee Society

**Interview with Doug Neasloss (Appendix A)**
Doug Neasloss, Chief Councillor- Kitasoo/Xai’xais Band Council and Resource Stewardship Director- Kitasoo/Xai’xais Integrated Resource Stewardship Authority

**Kelp Data and Background**
Hakai Institute

**Otter Kelp Research** (film clip)
Jenn Burt

**Ratfish** (film clip)
Florian Graner, Sealife Productions

**Seasonal Use Cycles of the Kwakwaka’wakw**
Emily Aitken, Tlowitsis Nation

**Supporting Emerging Aboriginal Stewards – SEAS** (film clip)
Philip Charles
Resource Overview

Elementary Resource

The Elementary resource has been designed for Grades 4-7, using a hands-on, inquiry-based approach exploring themes of Indigenous Knowledge, collaborative research, marine planning, collaborative decision-making, careers and stewardship. It focuses specifically on Science and Social Studies but can be used cross-curricular as certain activities are Mathematics, English Language Arts, Career Education and Arts Education based. The key subjects have been identified at the beginning of each lesson plan. Educators are encouraged to consider using science journals or duotangs for the students to keep track of their individual learning.

Secondary Resources

The Secondary resources have been designed to align with the updated Social Studies Grades 11 & 12 and the Environmental Science Grades 11 & 12 BC curriculum. Both units provide an inquiry-based approach to exploring themes of collaborative planning and research, Indigenous Knowledge, marine planning, and stewardship.

From an Environmental Science perspective, the Great Bear Sea serves as a useful BC case study to consider how development and management of resources in the area can be planned and implemented as a means of moving toward sustainability for generations to come. The unit provides an indepth exploration of sustainable resource management and planning through the lens of the Great Bear Sea.

From a Social Studies perspective, the innovative approach to marine planning, as presented through the Marine Planning Partnership (MaPP), provides a new lens for considering issues of governance and collaboration. By exploring this key region of BC through the multiple lens of ecological, economic, geographic and social/cultural perspectives, students have the opportunity to consider both the benefits and challenges associated with collaborative decision making, and how this could be considered at local, national and international levels.

Both units provide an opportunity for educators to specifically look at First Peoples’ perspectives and worldviews, and embed these perspectives into all aspects of student learning.

Tips for Educators

The lesson plans, film clips and resources provide a framework for educators to facilitate a unit of study. The lessons have learning outcomes and concepts that build upon each other; however activities have been designed to allow for customization or differentiation as you move through the unit to suit the needs of your environment or learners. All units are inquiry-based and can be tailored to suit students’ interests and curiosity. At points in the units, it may be helpful to pre-teach concepts or learning strategies. These have been noted in lessons where appropriate.
These resources incorporate opportunities to engage in place-based learning by moving outside of your classroom and into your own place, as well as thinking critically about the importance of place and culture. We encourage teachers to incorporate the suggested ideas when possible to make connections to your own place as well as to the Great Bear Sea.

The resources also make suggestions for incorporating technology into the activities. Particularly at the upper elementary and secondary levels, one could take a technology-focused approach to the units by linking to the film clips via your own website or mediated online learning environments (such as Edmodo, Google classroom, Moodle, etc.) and encourage student engagement with the resources in this space. Questions for further exploration or inquiry could be mediated in an online environment, capturing evidence of student learning. Many online learning tools can also be incorporated into lessons, such as movie-making, pre/post surveys, blogs, personal websites, research tools, digital storytelling, etc.

How to Use and Access Materials

The resources have been divided into sections to guide the classroom teacher. For each lesson teachers will find required materials, lesson context and learning outcomes, step-by-step instructions for suggested activities, extensions and assessment ideas as well as black line masters. A Teacher Background section is also included for each lesson, highlighting additional background content for educators.

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

The full Exploring the Great Bear Sea Elementary and Secondary Curriculum Resources are available for download and viewing through the website: www.greatbearsea.net, including complete lesson plans as well as all supplementary materials for each lesson (film clips, images, etc.). Film clip transcripts have also been provided as a tool for educators.

We recognize that schools in rural or remote areas may have limited or inconsistent access to the internet and may not be able to download or view the resources. Please contact us through the website (www.greatbearsea.net) for alternate arrangements, or email at greatbearsea@gmail.com.
Curriculum Connections

All units were designed with the framework of the Core Competencies in mind, as outlined in the revised BC curriculum. Educators will see strong links to these competencies through the learning activities. These include:

- communication
- creative and critical thinking
- positive personal and cultural identity
- personal awareness and responsibility
- social responsibility

The resources also provide a framework for embedding First Peoples’ worldviews, and engaging with Traditional Knowledge, throughout the units. It is suggested that educators refer to the First Peoples’ Principles of Learning and other resources for more suggestions on embedding a First Peoples’ worldview into your teaching practice: www.fnesc.ca/learningfirstpeoples.

Elementary

The Elementary Unit for Grades 4 – 7 addresses a variety of Science and Social Studies Big Ideas, content and curricular competencies. This cross-curricular unit also offers activities that target Mathematics, English Language Arts, Career Education and Arts Education.

Secondary

The Environmental Science Unit for Grades 11 & 12 addresses a variety of Big Ideas, content and curricular competencies associated with this area of learning. This unit also offers activities that target Science for Citizens 11.

The Social Studies Unit for Grades 11 & 12 specifically addresses a variety of Big Ideas, content and curricular competencies associated with BC First Peoples 11, Human Geography 11 and Contemporary Indigenous Studies 12. This unit also offers activities that target Social Studies 10, Comparative Cultures 11, Physical Geography 11, Political Science 11, and Social Justice 12.

Curriculum Charts

See the following pages for BC curriculum connected charts.
Social Studies Curriculum Connections Grade 11

**Area of Learning:** BC First Peoples

**Big Ideas:**
- The identities, worldviews, and language of BC First Peoples are renewed, sustained, and transformed through their connection to the land.
- Cultural expressions convey the richness, diversity, and resiliency of BC First Peoples.
- Through self-governance, leadership, and self-determination, BC First Peoples challenge and resist Canada's ongoing colonialism.

<table>
<thead>
<tr>
<th>Content</th>
<th>Curricular Competencies</th>
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</thead>
<tbody>
<tr>
<td>- Traditional territories of the BC First Nations and the relationships with the land</td>
<td>• Use Social Studies inquiry processes and skills to ask questions; listen to the oral traditions of Elders and other local knowledge holders; gather, interpret, and analyze ideas; and communicate findings and decisions</td>
</tr>
<tr>
<td>- Impact of historical exchanges of ideas, practices, and materials among local BC First Peoples and with non-indigenous peoples</td>
<td>• Use holistic, experiential, reflective, and relational experiences to better understand connectedness and the reciprocal relationship of First Peoples and the sense of place</td>
</tr>
<tr>
<td>- The resistance of BC First Peoples to colonialism</td>
<td>• Recognize the consequences of our actions (cause and consequence)</td>
</tr>
<tr>
<td>- Contemporary challenges facing BC First Peoples, including legacies of colonialism</td>
<td>• Assess and compare the significance of the interconnections between people, events, and developments at a particular time and place, and determine what they reveal about issues in the past and present (significance)</td>
</tr>
<tr>
<td></td>
<td>• Explain different perspectives on past or present people, places, issues, and events, and distinguish between worldviews of today and the past (perspective)</td>
</tr>
<tr>
<td></td>
<td>• Make reasoned ethical claims about actions in the past and present after considering the context and values of the times (ethical judgment)</td>
</tr>
</tbody>
</table>
### Social Studies Curriculum Connections Grade 11

**Area of Learning:** Human Geography

**Big Ideas:**
- Analyzing data from a variety of sources allows us to better understand our globally connected world.
- Human activities alter landscapes in a variety of ways.
- A geographic region can encompass a variety of physical features and/or human interactions.

<table>
<thead>
<tr>
<th>Content</th>
<th>Curricular Competencies</th>
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</thead>
<tbody>
<tr>
<td>Relationships between cultural traits, the use of physical space, and impacts on the environment, including First Peoples cultures</td>
<td>Use geographic inquiry processes and skills to ask questions; gather, interpret, and analyze data and ideas; and communicate findings and decisions</td>
</tr>
<tr>
<td>Industrialization, trade, and natural resource demands</td>
<td>Assess the significance of places by identifying the physical and/or human features that characterize them (sense of place)</td>
</tr>
<tr>
<td>Increased urbanization and influences on societies and environments</td>
<td>Assess the interpretations of geographic evidence after investigating points of contention, reliability of sources, and adequacy of evidence (evidence and interpretation)</td>
</tr>
<tr>
<td>Relationships between natural resources and patterns of population settlement and economic development</td>
<td>Evaluate the features or aspects of geographic phenomena or locations to explain what makes them worthy of attention or recognition (geographical importance)</td>
</tr>
<tr>
<td>Political organization of geographic regions</td>
<td>Identify and assess how human and environmental factors and events influence each other (interactions and associations)</td>
</tr>
<tr>
<td></td>
<td>Make reasoned ethical judgments about controversial actions in the past or present, and determine whether we have a responsibility to respond (geographical value judgments)</td>
</tr>
</tbody>
</table>
## Social Studies Curriculum Connections Grade 12

**Area of Learning:** Contemporary Indigenous Studies

**Big Ideas:**
- The identities, worldviews, and language of indigenous peoples are renewed, sustained, and transformed through the connection to the land.
- Indigenous peoples continue to advocate and assert rights to self-determination.

<table>
<thead>
<tr>
<th>Content</th>
<th>Curricular Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>The varied identities and worldviews of indigenous peoples, and the importance of the interconnection of family, relationships, language, culture, and the land</td>
<td>Use Social Studies inquiry processes and skills to ask questions; listen to the oral tradition of Elders and other local knowledge holders; gather, interpret, and analyze ideas; and communicate findings and decisions</td>
</tr>
<tr>
<td>Factors that sustain and challenge the identities and worldviews of indigenous peoples</td>
<td>Use holistic, experiential, reflective, and relational experiences to better understand connectedness and the reciprocal relationship of First Peoples and the sense of place.</td>
</tr>
<tr>
<td>Community development, partnerships, and control of economic opportunities</td>
<td>Recognize the consequences of our actions (cause and consequence)</td>
</tr>
<tr>
<td></td>
<td>Assess and compare the significance of the interconnections between people, places, events, and developments at a particular time and place, and determine what they reveal about issues in the past and present (significance)</td>
</tr>
<tr>
<td></td>
<td>Determine and assess the long- and short-term causes and consequences, and the intended and unintended consequences of an event, decision, or development (cause and consequence)</td>
</tr>
<tr>
<td></td>
<td>Explain different perspectives on past or present people, places, issues, and events, and distinguish between worldviews of today and the past (perspective)</td>
</tr>
<tr>
<td></td>
<td>Make reasoned ethical claims about actions in the past and present after considering the context and values of the times (ethical judgment)</td>
</tr>
</tbody>
</table>
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. They will consider how this unique area – as one of the most biodiverse in the province and the world – functions in BC in terms of ecological, social/cultural, geographic and economic significance.

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:
  - Planning Part 1 (10 mins)
  - Respect (10 mins) – optional
- Teacher Background – Lesson 1
- 1.1 Sub-Regions of the Great Bear Sea
- 1.2 Multiple Lenses
- Great Bear Sea MaPP Study Area Map *
- Great Bear Sea MaPP Study Area With Sub-Regions Map *
- Great Bear Sea Regional Maps*

Learning Objectives:
Students will:

1. Understand and identify the ecological, economic, cultural/social and geographic importance of oceans, including the Great Bear Sea.

2. Communicate ideas and perspectives about oceans and marine resources orally and in writing.

3. Explore the ideas of stewardship and leadership in planning for the future of marine resources and ecosystems.
Lesson Context

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 and consider the communities and species that call this diverse ecosystem home.

Students will begin to explore the importance of this region from multiple lenses, including ecological, social/cultural, geographic and economic, considering what they already know about the area and the questions they hope to explore in future lessons. By exploring this key region of British Columbia through multiple lenses, students will need to consider how decision-making around one factor may impact/influence other factors, and the implications of this for the region as a whole. The lesson aims to help students make explicit that all lenses need to be considered in ensuring a healthy ecosystem, and thus economic prosperity and cultural well-being for generations to come.

Learning Activities

Part A

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

1. Share the following quotes with students, and have them identify the common theme or share their reactions to what is being said. Can they relate to the comments made? Why or why not?
   
   • *People seem to forget that First Nations people have been here for thousands of years and they’re a part of the ecosystems that are here. We’re not simply dependent on them, but we’re part of the functioning ecosystems.*
     – Dallas Smith, President, Nanwakolas Council
   
   • *Marine planning is extremely important, so important that my council passed a resolution to support it. And now we’re looking at the implementation phase. I would say that we have cautious optimism, it depends on how it’s going to unfold. You need a plan because haphazardly we’re not going to make it. We, being the planet.*
     – Carol Kulesha, Mayor (Past), Queen Charlotte, Haida Gwaii
   
   • *The sea, the great unifier, is man’s only hope. Now, as never before, the old phrase has a literal meaning: we are all in the same boat.*
     – Jacques Yves Cousteau, Oceanographer

2. Let students know that these quotes were taken from a film about an area in BC known as the Great Bear Sea. Project the Great Bear Sea MaPP Study Area Maps*

*Great Bear Sea MaPP Study Area Maps*
on a screen to show the area and sub-regions. With a partner, have students brainstorm what they already know about this area in BC.

3. As a class, facilitate a discussion around student responses. Some additional prompting questions may include:
   - Have you ever lived or visited any of the areas around the Great Bear 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 for BC and Canada?
   - What do you wonder about this region?

4. Divide the class into groups of 4, and have each group look at one of the regional maps more closely. Looking at the areas from a geographic perspective, have the groups discuss 2 potential benefits associated with the geography of the area, and 2 potential challenges. Discuss as a class.

5. Provide each group with a copy of 1.1 Sub-Regions of the Great Bear Sea for Marine Planning. Have groups list the unique geographic attributes of their assigned region of the Great Bear Sea, and how this may impact the region. Discuss these as a class and have groups consider any additional benefits/challenges associated with the geography of the regions. Reinforce the idea that coastal waters of BC have impacts for areas all over the province and beyond.

6. Have each student take some time to brainstorm 2 – 3 questions about the region and record these in a journal/notebook.

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.

2. On the board, list the following terms: ecological, geographic, economic, and social/cultural. Spend a bit of time reviewing these terms with students, including some examples (see Teacher Background – Lesson 1), drawing on prior knowledge when possible. Hand out a copy of 1.2 Multiple Lenses to each student (or have them create this in their journal/notebook) and have students jot down notes/questions regarding each factor as they watch the film clip.

3. Watch the Planning Part 1 film clip as a class.

4. Provide students with a few moments to make additional notes on their own.
Part B

Activity 1: Group Mind-Mapping (75 minutes)

1. Divide students into groups of 4 – 5 and provide each group with chart paper and a variety of pens/markers of different colours.

2. Ask each group to create a mind map focusing on the Great Bear Sea, using the notes they took in the previous activity as a starting guide. Use a different colour for each branch of the mind map stemming from “Great Bear Sea” in the center of the chart paper and have them incorporate key words and images in the mind map. Let students know that the 4 lenses may be natural starting branches of the mind map, but they are by no means limited to these ideas. (Note: This activity could also be done digitally, using a program such as Padlet or Stormboard.)

3. Reserve at least 20 minutes at the end of this activity for students to share their work. Have each group post their mind map around the classroom, and provide quiet ‘gallery walk’ time for students to review all the maps. Engage in a large group discussion, having students share their observations. Some possible prompting questions may include:
   • What is one new thing you learned and one new thing you wonder as a result of working in groups or reviewing all the mind maps?
   • Could some of the ideas/branches of your mind map overlap? For instance, consider how a species like salmon, which is important to the region, may be considered from an economic, cultural and geographic perspective.
   • What do you think are some of the biggest benefits and challenges of working and living in this region?

4. Have students return to the 2 – 3 questions that they developed at the end of the first activity in this lesson. Were some of their questions addressed? Have students create 1 - 2 additional questions that they now have about the Great Bear Sea.
Extension Ideas

• Have students research 1 or 2 of the questions they have about the Great Bear Sea. This can be related to any topic/curiosity/inquiry.

• Show the film clip Respect, Underwater Big House, Story of Gitnuganaks told by Vernon Brown, Kitasoo/Xai’xais Nation. Have students explore the significance of this story in First Peoples’ culture and the Great Bear Sea.

• Have students search online for information pertaining to the Great Bear Rainforest and the steps made to protect the area. Who was involved and how has the area been impacted?

• Research, visit and observe areas/habitats that are important in your local community, such as, eelgrass beds, tidal flats, estuaries, wetlands, bogs, marshes, beaches, lakes, rivers, shorelines, etc. Have students note the geographic attributes and significance of the area from multiple lens.

Assessment Ideas

• Formatively assess students’ engagement in group work and large group discussion.

• Assess students’ prior knowledge by collecting 1.2 Multiple Lenses.

• Use the mind maps for the Great Bear Sea as a formative assessment of students understanding of the multiple lenses and close viewing of the film clip(s).

• As an exit ticket, have students submit their questions.
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. A simple definition of biodiversity for students is the variety of living organisms in an ecosystem or habitat.

The Great Bear region is the traditional, ancestral and unceded territory for many First Nations 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.

This unit will help students develop critical thinking skills across multiple Social Studies courses. It also provides a framework for understanding the importance of ecosystem protection and planning for the future. Through watching the film and learning more about the specific regions of the Great Bear Sea, including the communities that live and
work in the regions, students have the opportunity to critically evaluate the future of the Great Bear Sea region from a number of perspectives:

- Ecological (biodiversity; threatened species; stewardship; conservation; sustainable harvesting; etc.)
- Geographic (estuaries, rivers, oceans; proximity to shipping routes and other sources of marine traffic; traditional territories and land ownership; etc.)
- Economic (ecotourism; fishing; marine highways; development; gas/oil lines; etc.)
- Social/Cultural (First Nations traditions and knowledge; family and community; worldviews and beliefs; values and norms; etc.)

Part of the role of the Great Bear Sea regional marine plans is to help advocate for sustainable job development. Many jobs depend upon the resources of the Great Bear Sea ecosystem. In order to maintain sustainability (healthy ecosystems and jobs for people in the community) economic and ecosystem needs should be considered in planning for the future.
1.1 Sub-Regions of the Great Bear Sea

Central Coast Sub-Region

The Central Coast plan area extends from Laredo Channel and the northern tip of Aristazabal Island in the north to the southern limit of Rivers Inlet and Calvert Island. Moving from the west, the area includes the shelf waters of Queen Charlotte Sound, hundreds of islands, and exposed rocky headlands which meet an intricate shoreline in the eastern portion of the plan area. The shoreline is cut by narrow channels and steep-walled fjords that contain ecologically complex estuaries, calm inlets and pocket coves. Its main communities include Bella Coola, Bella Bella, Ocean Falls, Wuikinuxv, Shearwater and Klemtu. First Nations partners participating in the Central Coast Marine Plan include the Heiltsuk, Kitasoo/Xai’xais, Nuxalk and Wuikinuxv Nations.

Haida Gwaii Sub-Region

Xaadaa Gwaay, Xaaydaga Gwaay.yaay, or Haida Gwaii (“Islands of the people”) is an archipelago on the edge of the continental shelf off the north coast of BC. It is surrounded by several large bodies of water – Hecate Strait separates Haida Gwaii from the mainland, and the islands are bounded by Dixon Entrance in the north, Queen Charlotte Sound to the south and the Pacific Ocean to the west. The chain of islands extends roughly 250 kilometres from its southern tip to its northernmost point and includes the communities of Gaaw (Old Massett), Masset, Gamadiis Llnagaay (Port Clements), Til.laal Llnagaay (Tlell), Hlgaagilda (Skidegate), Daajing Giids (Queen Charlotte) and K’il Llnagaay (Sandspit). Boundaries for the Haida Gwaii plan area are defined by the Haida Statement of Claim (east/south), the international boundary with the US (north), and the toe of the continental slope (west).

North Coast Sub-Region

The North Coast plan area includes an impressive stretch of coastline that is indented with deep fjords and dotted with thousands of islands. It is a region of profound beauty, significant ecological diversity and remarkable cultural richness. The North Coast plan area extends from Portland Inlet to the south end of Aristazabal Island, where it has an overlap with the northern boundary of the Central Coast plan area. The western edge of the North Coast plan area borders the Haida Gwaii plan area. Prince Rupert, Terrace and Kitamaat are the largest communities in the North Coast plan area, and support an overall population of approximately 42,000 people. Participating First Nations in the North plan area include the Gitga’at, Gitxaala, Kitsumkalum, Kitselas, Haisla, and Metlakatla Nations, who are represented by the North Coast-Skeena First Nations Stewardship Society in this planning process.

North Vancouver Island Sub-Region

The North Vancouver Island plan area is home to the Kwakwaka’wakw First Nations and lies between northern Vancouver Island and B.C.’s mainland. There are many islands, inlets and fjords within the area, which is characterized by its natural beauty and biodiversity of species and ecosystems. Major water bodies include Queen Charlotte Sound, Queen Charlotte Strait, Johnstone Strait, Smith Inlet, Seymour Inlet, Knight Inlet and Bute Inlet. The plan area includes the communities of Port Hardy, Port McNeill, Alert Bay, Sayward and Campbell River. Members of the Nanwakolas Council and partners in the MaPP initiative are: Mamalilikulla-Qwe’Qwa’Sot’em, Tlowitsis, Da’nakda’xw-Awaetlatla, Gwa’sala-Nakwaxda’xw, Wei Wai Kum, Kwisakah and the K’ómoks First Nations.
Name:________________________

1.2: Multiple Lenses

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<tr>
<th>Ecological</th>
<th>Social/Cultural</th>
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Lesson 2: Collaborative Decision-Making

Overview: Students will explore the concept of collaborative decision-making around important issues that can have environmental, social and cultural impacts. They will consider different elements of decision-making, including the engagement of stakeholders, valuing multiple perspectives, and the processes and challenges involved in collectively making decisions. Through the example of the Great Bear Sea Marine Planning Partnership (MaPP), they will explore a specific, innovative example of collaborative decision-making in BC.

Suggested Time: 2 sessions of 75 minutes each

Materials and Resources:
- Computer, projector and screen
- Chart paper and markers
- Lesson 2 Film Clips:
  - Planning Part 2 (13 mins)
  - Great Bear Land Use Plan (19 mins) – optional
- Teacher Background – Lesson 2
- 2.1 Great Bear Sea Guided Viewing Questions
- Marine Planning Partnership Website: www.mappocean.org
- 10 Things You Need to Know About MaPP video: www.mappocean.org

Learning Objectives:
Students will:

1. Use inquiry processes and skills (ask questions; gather, interpret and analyze ideas) in collaborative decision-making.

2. Identify how different perspectives and values contribute to decision-making.

3. Explore a model of collaborative decision-making and governance with the Marine Planning Partnership for the Great Bear Sea.

4. Explore how marine planning may contribute to a sustainable future.
Lesson Context

Part A of this lesson provides students with an introduction to the concept of collaborative decision-making, in particular, the different processes and challenges that may be involved in decision-making around a shared issue, objective or goal. Students will have the opportunity to work in groups to practice providing opinions and listening to perspectives around a mutually important issue. Students will begin to see that collaborative decision-making involves drawing on background knowledge and experience, voicing opinions and rationales for those opinions, thinking about personal and collective consequences, and listening carefully and respectfully to others.

In Part B, students have the opportunity to work more closely with the Great Bear Sea film, and are introduced 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 are introduced to the various partners and stakeholders involved in both marine and land-based decision-making in BC.

Learning Activities

Part A

Activity 1: Enacting Engagement and Collaboration (60 minutes)

1. Write the term “stakeholder” on the board. With a partner, have students consider what the term means, perhaps in reference to an example:
   • If a big decision were to be made about the school, what stakeholders might be involved? For example, building a new cafeteria.

2. As a class, determine a working definition of stakeholder. For example, “a person with an interest or concern in something.”

3. Divide the class into groups of 4 – 5 students. Ensure an even number of groups. Explain that the group members will work together, as stakeholders, to put forward recommendations about an issue of concerns, such as the following:
   • It has been determined that this course will be graded on a pass/fail marking system. As a group, you will need to determine the 5 criteria that a student must meet to pass the course.
   • Explain to students that they will have 20 minutes to work together to come up with their recommendations for their 5 criteria. Have students record the criteria on chart paper. Students should be prepared to defend their criteria based on evidence.
4. After 20 minutes, lead a quick group discussion around how the process went. Was it challenging to come up with recommendations? Why or why not?

5. Now explain that students will join with another group and have 10 minutes to review both sets of criteria, and to determine a revised set of 5 criteria they will settle on. Some of their criteria may be the same or similar, and that may be a good place to start. Again, students should record their finalized criteria on chart paper, and after 10 minutes, should be prepared to share their results and process with the class.

6. Have each group present their findings and share how they decided on their recommendations. Some guiding questions may include:
   - Were there similarities in your proposed recommendations as you came together?
   - How did you collectively determine the revised set of 5 criteria? Did you use any evidence to inform your decision-making?
   - Did some members of the group have to give up strongly held opinions in order to reach a decision? If so, were there some important criteria lost or challenged?

7. As a large group, consider the following:
   - There were likely a lot of similarities between lists since all students have a similar vested interest in the outcome. If this were a real process, are there any other stakeholders that should be consulted? Who would be the final decision-makers? (perhaps teachers, principals, parents, post-secondary, Ministry of Education.) What may be the challenges of this approach?

**Activity 2: A BC Example of Collaborative Decision-Making (15 minutes)**

1. Have students consider larger scale decision-making. Using a 5 minute think/pair/share, have students consider what mechanisms/structures we have in the province for making big scale decisions (whether or not to host the Olympics, where to build a new dam, etc.).

2. As a large group, share some of the responses. Make the following explicit:
   - big decisions can have a great impact on all British Columbians (and likely others too)
   - there are varying and sometimes competing factors that influence decision-making: economic, social, ecological, cultural
   - when decisions are made that do not adequately address all factors, there can be major impacts on the environment and/or people
3. Inform the students that the film, *The Great Bear Sea: Reflecting on the Past, Planning for the Future*, looks at a 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.

4. In preparation for viewing of a portion of the film next class, have students brainstorm who they think might be involved in the decision-making for the future of the Great Bear Sea.

5. Consider having students submit a reflective response to the criteria setting process in Activity 1. Did they feel that their voice was heard and considered? What did they find challenging about this process?

**Part B**

**Activity 1: Great Bear Sea Collaborative Decision-Making (55 minutes)**

1. Provide each student with a copy of *2.1 Great Bear Sea Guided Viewing Questions* and review it together as a class. Explain that as a class, students will view a portion of the film that shows the unique way that groups in BC are coming together to collaborate around the future of the Great Bear Sea (see Teacher Background – Lesson 2).
   - The Marine Planning Partnership (MaPP) is a co-led partnership between 18 First Nations and the Province of British Columbia. These partners in turn then engaged stakeholders in each region to gain their input about regional marine plans.
   - Provide students with some context around the difference in regulation in Canada for marine/oceans and land. When viewing the film clip, students might consider why the Marine Planning Partnership is so unique.

2. Watch the Planning Part 2 film clip. If time permits, suggest that students watch closely the first time, and then again a second time to make notes.

3. Provide students with some time to complete the questions on their own. Then, in small groups, have students discuss the questions together and continue note taking.

**Activity 2: Marine Planning Partnership (MaPP) (20 minutes)**

1. From the MaPP website (www.mappocean.org), view the *10 Things You Need to Know About MaPP* video (you can also download a pdf with this same information from www.mappocean.org).
2. As a large group, discuss what makes MaPP so unique:
   - Co-led partnership between the Province of British Columbia and 18 First Nations.
   - Informed by scientific, traditional and local knowledges.
   - Gathers input and advice from stakeholders, scientists and the general public.
   - First Nations and 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.
   - As homework, consider having students review the MaPP website and look specifically for information about one specific region.

**Extension Ideas**

- Have students look more closely at the Great Bear Rainforest agreement with the film clip *Great Bear Land Use Plan*, including potential differences and similarities compared to the Great Bear Sea.

- Have students review the MaPP website (www.mappocean.org), looking specifically at one region, and extend their thinking to consider any national or global impacts that may be associated with implementation of the plan.

**Assessment Ideas**

- Formatively assess students’ engagement in group work and large group discussion.

- Collect the reflective response.

- Collect *2.1 Great Bear Sea Guided Viewing Questions* for each student.
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).

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.

The Marine Planning Partnership (MaPP) 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.”

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.
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, 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.*
2.1: 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?
Lesson 3: Collaborative Research

Overview: Students will explore the concept of collaborative research and how this relates to marine planning. They will consider types of knowledge, including local knowledge, Traditional Knowledge, Traditional Ecological Knowledge (TEK), and academic research.

Suggested Time: 2 classes (75 minutes each)

* Teacher Note: Materials with a * are available on the Great Bear Sea USB, or at www.greatbearsea.net.

Materials and Resources:
• Computer, projector and screen
• Lesson 3 Film Clips:
  □ Traditional Knowledge (8 mins)
  □ Collaborative Science (8 mins)
  □ Bear Research (5 mins)
  □ First Nations History Overview (14 mins) – optional video and audio files
• Teacher Background – Lesson 3
• 3.1 Collaborative Research
• 3.2 Interview with Doug Neasloss – optional
• Haida Marine Seasonal Round * – optional
• Kwakwaka’wakw Seasonal Use Cycle * – optional

Learning Objectives:
Students will:

1. Explore and explain different perspectives around place, particular with regard to the environment and sustainability.

2. Identify different types of knowledge, particularly Traditional Ecological Knowledge, and how these contribute to scientific research.

3. Understand how research and information gathering can help inform decision-making at the local and provincial levels.
Lesson Context

This lesson explores the concept of collaborative research, looking specifically at how this approach is being used to assist decision-making for the future of the Great Bear Sea through the Marine Planning Partnership. Students explore the concept of Traditional Knowledge, and look at some examples from the Great Bear Sea region, considering how this knowledge is critical to future planning, and particularly ecological planning that is connected to place. Students watch film clips describing some of the innovative research taking place in the region, with partnerships between local communities, First Nations, and academic researchers. This collaborative research approach explains how Traditional Knowledge and academic research can help inform the decision-making process.

Teacher Background – Lesson 3 provides an overview of Traditional Knowledge (or Indigenous Knowledge), as well as the concepts of Traditional Ecological Knowledge (TEK) and collaborative research. Whereas TEK continues to be a fundamental aspect of Indigenous culture as it has been for thousands of years, it is only recently being recognized as integral to furthering the knowledge base of the scientific community and general public. The collaborative research modelled through the Marine Planning Partnership is an innovative approach to resource management in British Columbia.

Learning Activities

Part A

Activity 1: Types of Knowledge (30 minutes)

1. In small groups, have students consider the following ‘what if’ scenario:
   - Imagine we have all just survived a large catastrophe (like an earthquake, a near apocalypse, etc.). Modern and technological forms of electricity, communication, etc., are currently not available and may not return.
     i. What would we need to know and do to survive?
     ii. What types of knowledge might we have to seek out?
     iii. Who would we ask for help?
     iv. If you just moved to the area, what would make this more challenging?

2. Facilitate a class discussion, with groups sharing their ideas. Ask students to consider knowledge that has been passed down from generation to generation and knowledge that is connected to the land or place in which you reside. Have them consider specific types of knowledge that they have that has been passed on to them from their families or communities. Have students also consider how this knowledge has been passed on, and how this process may have changed over
time. Whereas in the past, traditions were generally passed down orally, this is becoming more and more challenging now as we rely more on technology or the written word. Preserving traditions orally becomes very important in the scenario above. What are the consequences of diminishing oral histories?

Activity 2: Traditional Knowledge (45 minutes)

1. If it has not come up already, introduce the term Traditional Knowledge (see Teacher Background – Lesson 3), and ask students to explain what they think this means. It is important to recognize that Traditional Knowledge encompasses a vast and sophisticated system of knowledge, including stories (such as Underwater Bighouse, Story of Gitnuganaks from Lesson 1 extension activity, or other local stories that students may be familiar with), values (such as, harvesting only what one can eat, process or distribute), governance systems (such as, where specific families or groups hold rights to marine harvests).

2. Explain to students that one particular type of Traditional Knowledge – the local knowledge First Peoples have about the natural world in their traditional environment – is sometimes referred to as Traditional Ecological Knowledge (TEK). Facilitate a discussion about TEK, and have students provide examples from their own local communities or what they have seen so far in the film clips. Some important points to reiterate:

   • TEK is local knowledge pertaining to the particular territories in which people live, which has been (and continues to be) passed down from generation to generation. While First Peoples share some common values and worldviews, local knowledge captures the nuances and specifics of place, about local ecosystems, sustainable use of resources and the interconnectedness of all living and non-living things.

   • TEK is knowledge about how to live and thrive in a particular place. For Indigenous peoples around the world (and First Peoples here in BC), TEK has allowed communities to flourish for thousands of years, with knowledge passed on from one generation to the next.

3. Watch the Traditional Knowledge film clip as a class. As students watch, have them take note of the examples of Traditional Knowledge and TEK as they watch.

4. In groups, have students share their examples and record their notes on chart paper. They can add other examples based on their own experience, examples from their communities, etc.

5. Provide the groups with time to review the charts from other groups, ask questions, and provide feedback.
Part B

Activity 1: Collaborative Research (75 minutes)

1. Recall the film clips watched previously in Lesson 1 and 2 (as well as the Marine Planning Partnership website if students have reviewed). Ask students to consider what type of information the partners (the 18 First Nations and the Province of British Columbia) would need to gather in order to develop the regional plans.
   - Reiterate that as a means of creating the regional plans, partners draw on different types of knowledge and research to help inform their decisions.

2. Provide each student with a copy of 3.1 Collaborative Research. As they watch the Collaborative Science film clip, have students note examples of the different types of research/knowledge being used to inform decision making, and specifically how the different aspects of TEK and academic research connect.

3. After watching the clip, provide students with a few minutes to take notes. Repeat this process with the Bear Research film clip. You may also suggest that students note some of the similarities and differences between the examples of collaborative research.

4. Have students discuss their answers with a partner, then share as a class.

5. Have students return to their Traditional Ecological Knowledge charts from Part A, and suggest additional thoughts after viewing the film clips.

6. Together as a class, come up with a definition for collaborative research (see the Teacher Background – Lesson 3).

7. Have students submit a reflective response to one of the following questions:
   - Think of another example where collaborative research may be helpful for planning or decision-making. How might it be used and how would it be helpful?
   - Think about the potential consequences of not being mindful to record oral history as we move into the future. Consider what might be lost if histories are not recorded. You may wish to use an example from the past to reinforce your thinking (whose voices were silenced by not recording history in the past, the value we place on stories as a society, etc.).

Closing

- In preparation for Lesson 4, divide the class into four groups, one for each region of the Great Bear Sea:
  - Central Coast, North Vancouver Island, Haida Gwaii, North Coast
Lesson 4 assumes that student groups have access to technology to view their portion of the film as a small group (on devices in the classroom or in a computer lab). Depending on your circumstances, students could watch the film clips at home after Lesson 3 or the class could watch all four film clips together in class and then break off into groups thereafter. For watching at home, the clips are available on the website: www.greatbearsea.net. Clips on the website are YouTube links, so these can be embedded into your own class website and/or online learning space, with additional instructions for students, opportunities for sharing comments, etc.

### Extension Ideas

- Disseminate the **3.2 Interview with Doug Neasloss** (or use the film 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 journal response addressing one of the comments/issues that Doug raises.

- Seasonal rounds or seasonal use cycles map the Traditional Knowledge of an area, displaying the when and what of harvesting around the seasons for a specific place. Have students explore two examples from the Great Bear Sea region using the **Haida Marine Seasonal Round** and the **Kwakwaka’wakw Seasonal Use Cycle**.

- Have students research an example of Traditional Knowledge in your local region, and/or invite a Knowledge Keeper into the classroom as a guest speaker.

- As a class, explore the First Nations Principles of OCAP, a set of standards that establish how First Nations data should be collected, protected, used or shared. (www.fnigc.ca/ocap.html)

### Assessment Ideas

- Formatively assess students’ engagement in group work and large group discussion.

- Collect **3.1 Collaborative Research** for each student.

- Collect the reflective responses.
Teacher Background – Lesson 3

Indigenous and Traditional Ecological Knowledge (TEK)

Thinking generally about these concepts, Indigenous or Traditional Knowledge refers to the vast, diverse and sophisticated body of knowledge of a group of peoples that has been generated over thousands of years, is passed down from one generation to another, and continues to evolve over time. It is knowledge that pertains not only to cultures and beliefs, but also physical space, environments and place. As noted by the Assembly of First Nations:

“Although there is no universally accepted definition of “traditional knowledge”, the term is commonly understood to refer to collective knowledge of traditions used by Indigenous groups to sustain and adapt themselves to their environment over time. This information is passed on from one generation to the next within the Indigenous group. Such Traditional Knowledge is unique to Indigenous communities and is rooted in the rich culture of its peoples. The knowledge may be passed down in many ways, including: storytelling; ceremonies; dances; traditions; arts and crafts; ideologies; hunting and trapping; food gathering; food preparation and storage; spirituality; beliefs; teachings; innovations; medicines.”

The term Traditional Ecological Knowledge (TEK) is perhaps the most popular term used to refer more directly to the knowledge that First Peoples’ have in relation to the natural world, and specifically the distinct ecosystems and landscapes in their traditional environments. Again, there is not a universally recognized definition of TEK, but in helping students understand this concept, the following points may be useful:

- TEK is local knowledge pertaining to the particular territories in which people live, which has been (and continues to be) passed down from generation to generation. While First Peoples share some common values and worldviews, local knowledge captures the nuances and specifics of place, about local ecosystems, sustainable use of resources and the interconnectedness of all living and non-living things.

- TEK is knowledge about how to live and thrive in a particular place. For Indigenous peoples around the world (and First Peoples here in BC), TEK has allowed communities to flourish for thousands of years, with knowledge passed on from one generation to the next.

- The environmental knowledge of generations about a specific local place is very important in the study of science, and thus TEK is used widely in various fields of science, such as resource management, climate change and sustainability.

It is important to recognize that Indigenous Knowledge or Traditional Knowledge does not just encompass ecological knowledge (TEK), but also a variety of other systems...
of knowledge including (but not limited to) cultural, historical, economic, political and societal information belonging to a group of peoples. Consider some of these additional resources to learn more:

**Appendix A: Interview with Doug Neasloss**

**Appendix B: Indigenous Knowledge**

**Assembly of First Nations Environmental Stewardship – Traditional Knowledge**

**First Nations Education Steering Committee Science First Peoples Resource**
www.fnesc.ca/science-first-peoples

**Traditional Ecological Knowledge Prior Art Database**
http://ip.aaas.org/tekindex.nsf/TEKPAD?OpenFrameSet

**World Intellectual Property Organization**

**Collaborative Research**

*Contributed by Alejandro Frid - Science Coordinator/Ecologist Central Coast Indigenous Resource Alliance (27 April 2016). Do not duplicate without permission from the author.*
www.alejandrofridecology.weebly.com/marine-resources-and-first-nations.html

Modern Indigenous people embrace new technologies and do not isolate themselves from contemporary culture and economy, yet maintain a tradition of deep interconnection with our non-human kin. Their gathering of edible and medicinal plants, their hunting and fishing, bring nourishment that not only is physical but also essential to sustaining worldviews that have been rooted in place for many generations. The implication is that habitat destruction and biodiversity loss are inseparable from the demise of cultural diversity, and therefore the rights of many human beings. Not surprisingly, Indigenous people have become conservation leaders in many parts of the world. Their efforts to conserve the ecosystems that sustain their traditional foods — mainly through protected areas that exclude large-scale exploitation — could make ecosystems more resilient to climate change and other stressors.

In the Central Coast of British Columbia, the Heiltsuk, Kitasoo/Xai’xais, Nuxalk, and Wuikinuxv First Nations have joined forces to proactively manage their resource, fostering collaborative research between scientists and holders of traditional knowledge. The elements of this collaboration are complementary.

On the one hand, science tests for explicit mechanisms that might affect ecological communities — such as fisheries and climate change — and uses empirical findings to
predict future conditions. Yet science often occurs in short spurts and in few places, suffering from short-term, narrow perspectives that limit understanding.

In contrast, Indigenous Knowledge derives from cumulative and collective observations made by many generations of people who are connected to the resources of vast ecosystems. Oral traditions preserve this knowledge as Indigenous laws and stories that transcend many limitations of science.

In concert, science and traditional knowledge can merge the holistic and long-term perspectives of Indigenous people and the predictive abilities of science. The potential result is a stronger foundation for conservation and resource management policies.
Name: ______________________

3.1: Collaborative Research

Traditional Knowledge  Academic Research
3.2 Interview with Doug Neasloss

The following is an excerpt from an interview with Doug Neasloss, Chief Councillor, Kitasoo/Xaï’xais Band Council & Resource Stewardship Director, Kitasoo/Xaï’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/Xaï’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 Xaï’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 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 that 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.
Lesson 4: Mock Regional Planning Meeting

**Overview:** Students will explore the various perspectives, opinions and evidence presented through the Great Bear Sea film in all four regions in preparation for a mock Great Bear Sea Regional Planning Meeting. In groups, students will be tasked with representing the perspectives of a particular region or point of view (ecological, social/cultural, geographic, economic), and then communicating recommendations to be considered in future planning.

**Suggested Time:** 3 – 6 classes (~75 minutes each)

*Teacher Note:* Materials with a * are available on the Great Bear Sea USB, or at www.greatbearsea.net.

**Materials and Resources:**
- Computer, projector and screen
- Chart paper and markers
- Multi-coloured stickers or tabs
- Lesson 4 Film Clips:
  - Central Coast (20 mins)
  - Haida Gwaii (15 mins)
  - North Coast (17 mins)
  - North Vancouver Island (20 mins)
- Teacher Background – Lesson 4
- 4.1 Regional Perspectives Viewing Guide
- 4.2 Developing Regional Recommendations
- 4.3 Self-Assessment Checklist
- 4.4 Group Assessment Checklist

**Supplementary Materials – For Student Research***
- Central Coast
  - Herring Research (21 mins)
  - Harvesting Kelp on the Central Coast of BC *
- Haida Gwaii
  - Intertidal Walk Video (10 mins)
  - Haida Marine Seasonal Round *
  - Haida Ocean and Way of Life Brochure *
- North Coast
  - Cumulative Effects (20 mins)
  - Coastal First Nations Marine Spatial Planning Brochure *
- North Vancouver Island– North Coast
  - Clam Gardens (2 mins)
  - Kwakwaka’wakw Traditional Ecological Knowledge *
  - Kwakwaka’wakw Seasonal Use Cycle *
Learning Objectives

Students will:

1. Explore and identify local place-based examples of marine planning, including perspectives, opinions, and research.

2. Consider how researched perspectives have ecological, economic, cultural/social and geographic importance and impact, particularly with regard to sustainability.

3. Using inquiry process skills, research and communicate findings with regard to marine planning for the Great Bear Sea.

4. Develop processes for working together and collaborative decision-making.

Lesson Context

Engaging in a mock planning meeting can take a number of structures depending on the level, interest and engagement of your students. One structure is presented here, which groups students into the regional areas explored through the film, and has them researching evidence as well as voices and perspectives from that particular region. There are also some suggestions for alternative structures in the Teacher Background – Lesson 4. Whichever structure is used, preparation and then carrying out the meeting will take a number of class sessions.

In the Marine Planning Partnership (MaPP), each sub-region has an Advisory Committee to provide input to the partners (18 First Nations and the Province of British Columbia) during the development of the marine plans. In Part A of this Mock Regional Planning Meeting, students take on the role of regional advisory committee members, taking on various perspectives (as provided in the film clips and resources provided) and presenting recommendations that they think should be considered in future planning for the Great Bear Sea. During this portion of the lesson, students work in groups, looking at a specific region of the Great Bear Sea, identifying perspectives and how those perspectives might be considered through ecological, social/cultural, geographic and economic lenses. By doing so, they can prepare to take on roles and perspectives and present recommendations during the Mock Regional Planning Meeting. The film serves as a primary resource for researching the voices and perspectives of those in the particular region. This structure assumes that student groups have access to technology to view their portion of the film as a small group (on devices in the classroom or in a computer lab). Depending on your circumstances, students could watch the film clips at home or the class could watch all 4 film clips together and then break off into groups thereafter to explore the additional materials and plan their presentations. For watching at home, the clips are available on the website: www.greatbearsea.net, or could be shared from the Great Bear Sea USB using class websites or online learning spaces.

Part B has students furthering their understanding about the region to help inform their
recommendations. In addition to the regional film clips, other resources are provided for students to extend their research, thinking and evidence-base, such as additional film clips showing a number of different perspectives (research, fishing, etc.), as well as several text-based and image-based documents. A number of seasonal rounds are included, which display Traditional Ecological Knowledge of the movement from one resource-gathering area to another throughout the year.

In **Part C**, students now take on the role of the decision-makers (in the MaPP, this is the 18 First Nations and the Province of British Columbia) and consider how they might go about prioritizing the recommendations in order to formulate the regional plans.

As preparation for leading this lesson, review the **Teacher Background – Lesson 4**, as well as the process laid out in **Part A, Activity 1**. Please note, the **North Vancouver Island** film clip includes an Elder discussing suicide in his community. Please review this clip prior to sharing the material with students.
Learning Activities

Part A (1 class session + individual viewing time, where needed)

Activity 1: Introducing the Mock Regional Planning Meeting and Setting Expectations (25 minutes)

1. Review the Teacher Background – Lesson 4 and then introduce the concept to students and develop a structure for class sessions to cover viewing, preparation and then engaging in the Mock Regional Planning Meeting.

2. If not done already, have students form 4 groups, one for each region of the Great Bear Sea. Provide each student with 4.1 Regional Perspectives Viewing Guide and 4.2 Developing Regional Recommendations (for preparation of presentation). Review both together as a class and review the following process:

   • Groups will first watch a film clip (approximately 20 minutes) showing the particular region of the Great Bear Sea and work through 4.1 Regional Perspectives Viewing Guide.
   • Groups will be given additional resources and research time to further inform their thinking as they prepare 7 - 10 recommendations that they feel should be considered in future marine planning for their region of the Great Bear Sea. These recommendations should reflect the perspectives, opinions, research and needs of the regions they are researching and promote the need to keep the Great Bear Sea a viable ecosystem for generations to come.
   • Groups should then use 4.2 Developing Regional Recommendations to capture their recommendations. (Note: the number of recommendations chosen could be determined by the number of students per group; this allows each group member the opportunity to present one of the recommendations during the Mock Regional Planning Meeting).
   • In presenting the recommendations, students should back up their suggestions using evidence from the film or other resources/research.
   • Once all groups have presented their recommendations, the whole class will then take on the role of the decision-makers (in the MaPP, this is the 18 First Nations and the Province of British Columbia) and consider how they might go about prioritizing the recommendations in order to formulate the regional plans.

3. At this point, it may be helpful to co-create a presentation rubric as a class to guide learning and preparation over the coming class sessions.
Activity 2: Great Bear Sea – Regional Exploration (50 minutes)

1. In their groups, students view the regional film clip and work on the 4.1 Regional Perspectives Viewing Guide.

2. Encourage students to identify any ‘missing voices’ that they think they may need to research. Can they identify any other perspectives that may help in providing evidence for strong decision-making? What would be their perspective and should it be something to consider by the group?

3. If time permits, consider having the students watch one of the other regional clips so they have a sense of other regional perspectives. Students could note the similarities and differences between regions.

Part B (1 – 3 class sessions)

Activity 1: Regional Research (time will vary)

1. Provide groups with time to research the region and review the supplementary materials (film and text).

2. Encourage students to also re-visit the MaPP website (www.mappocean.org), particularly to look at the various perspectives represented by the regional Advisory Committees.

Activity 2: Developing Regional Recommendations (time will vary)

1. As a class, you may want to provide some examples of simple, clear recommendations. Consider setting limits (1 sentence) to provide guidance to groups.

2. In working together to come up with their recommendations, consider providing some of the following questions to help facilitate group discussion:
   • What are some of the key points made in the film clips and research materials?
   • Are there any perspectives that are shared by many people or across groups?
   • Are there any competing perspectives? How would they deal with this?
   • Can you identify any bias in the perspectives? How should this be considered?
   • If you were trying to protect your neighbourhood or city so that your kids and grandkids could thrive, what would you consider? As an example, it may be helpful for students to think about recent BC First Nations land title claims, or First Peoples perspectives about preserving resources for future generations (see Teacher Background – Lesson 4 and Extensions).
• Part of planning for the future is about ensuring sustainability in the region. Generally, what does it mean to be sustainable? What needs to be considered in order to promote sustainability in the region (for example, jobs for the future, healthy fish stocks for sustenance and distribution, biodiversity, habitat preservation, etc.)?

3. Have each group complete **4.2 Developing Regional Recommendations** and prepare a plan for presenting during the meeting.

4. Have each group list their recommendations on chart paper in preparation for their presentation.

**Part C (1 – 2 class sessions)**

**Activity 1: Mock Regional Planning Meeting – Group Presentations**

1. Have each group present their recommendations and rationales.

2. After each presentation, display the chart paper with recommendations in accessible locations around the room.

**Activity 2: Prioritizing Recommendations**

1. As a group, determine how to structure this part of the meeting in order to prioritize recommendations and determine the five most important recommendations for the region(s) (see **Teacher Background – Lesson 4** for ideas and prompts for students).

2. Develop the five most important recommendations and have a few students record these on new chart paper or electronically for sharing with the class.

3. Provide each student with a copy of **4.3 Self-Assessment Checklist** and each group with **4.4 Group Assessment Checklist** and have students/groups complete.
Extension Ideas

• Have students draft regional marine plans for their area. Using the recommendations, develop 5 – 10 action items for the regional plans.

• Have students research the Tsilhqot’in Decision, a recent historic declaration of Aboriginal title to lands outside a reserve. The Tsilhqot’in Nation vs British Columbia was a five year trial, culminating in 2014, with a Supreme Court of Canada decision which established land title for the Tsilhqot’in First Nation.

• Have students address one or more of the following questions as a reflective response:
  □ Describe an example in Canadian history where communities or people did not have their voices heard in important decision-making, and how this may have impacted these communities.
  □ Do you think the recommendations determined for your region would be helpful and sufficient in guiding marine planning into the future? Explain your answer.

Assessment Ideas

• Formatively assess students’ engagement in group work and large group discussion.

• As a class, develop a presentation rubric and use this to assess participation during the Mock Regional Planning Meeting. Some criteria may include: providing multiple perspectives (through various lenses); providing rationale for recommendations; providing evidence for rationale; clear communication; respectful listening; thoughtful engagement with ideas presented, etc.

• Collect 4.1 Regional Perspectives Viewing Guide, 4.2 Developing Regional Recommendations, 4.3 Self-Assessment Checklist and 4.4 Group Assessment Checklist.

• Collect the reflective responses (if assigned).
Teacher Background – Lesson 4

The Marine Planning Partnership (MaPP) www.mappocean.org represents an innovative response and approach to the challenge of sustainable planning for the Great Bear Sea for generations to come. As outlined on the MaPP website, each sub-region had an Advisory Committee to provide input to the partners (18 First Nations and BC government) during the development of the marine plans. These Advisory Committees are listed on the MaPP website and may be a helpful tool for students to look at in their research process. It is important for students to understand that the MaPP process is quite unique in that it 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. 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. The Advisory Committees are diverse (and how each sub-region structured committees varies); but from the lists on the MaPP website you will see that many hold expertise in a certain area or represent various special interest groups. Other stakeholders include the various marine sectors like fishing, recreation, aquaculture, marine transportation, conservation, etc. 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 activities modelled in this lesson are not meant to model the exact processes used in regions in the MaPP. These vary by region and are of course more nuanced and complex. Instead, the activities serve as accessible ways for students to practice the skills of close listening, researching, providing evidence for claims and communicating rationales.

In Lesson 3, an interview with Doug Neasloss, Chief Councillor, Kitasoo/Xai’xais Band Council & Resource Stewardship Director, Kitasoo/Xai’xais Integrated Resource Stewardship Authority, is provided as a possible extension activity. Doug shares some of the history of the First Nations in the Central Coast region of BC, and if not already shared with students, this would be a helpful document for students to read (or watch or listen to, as this is also provided in film and audio form) before Part C of this lesson. It will provide students with some historical background and considerations to keep in mind when taking on the role of decision-makers, particularly in considering the impacts of colonialism for First Nations in the Great Bear Region, and the resistance and response to colonialism which continues today.

In considering how the MaPP is an example of collaborative decision-making between First Nations and the Province of British Columbia around the use of space and place, this may also be an opportunity for students to learn more about Canadian constitutional law with regard to First Nations. One area for further study associated with this lesson may be the concept of First Peoples’ title. The following website provides some background information you may find helpful: http://indigenousfoundations.arts.ubc.ca. As referenced on the website: “Aboriginal title refers to the inherent Aboriginal right to land
or a territory. The Canadian legal system recognizes Aboriginal title as a sui generis, or unique collective right to the use of and jurisdiction over a group’s ancestral territories. This right is not granted from an external source but is a result of Aboriginal peoples’ own occupation of and relationship with their home territories as well as their ongoing social structures and political and legal systems. As such, Aboriginal title and rights are separate from rights afforded to non-Aboriginal Canadian citizens under Canadian common law.”

Tips for Facilitating a Mock Regional Planning Meeting

Structured Role-Play

This lesson provides a structure for students taking on various perspectives as members of a regional Advisory Committee, presenting recommendations they think should be considered in the planning process for the partners (18 First Nations and the Province of British Columbia). Some other ideas for structuring a role-play:

- Have the class select a topic of interest, and have students take on a particular perspective associated to that topic. For example, sustainable harvesting, First Peoples rights and Canada’s constitutional law, biodiversity, ecotourism, policy development, etc. Students could work independently or in groups.
- Come up with a number of roles (teacher led or as a class) and pick these at random (or students list their top three options). Some roles may include: scientist, commercial fishery, educator, stewardship non-profit, parent, student, First Nation Elder or chief, provincial government representative, oil industry worker, etc.
- Include students in roles such as moderation, facilitation, recorder, witness, etc.

This could also be the starting point of a larger inquiry project, where students fully research not just the ideas presented in the film, but other interest areas of their choosing, or an issue framed around a question. The supplementary materials provided could be used as a starting point for further exploration.

Once the structure has been determined, consider co-developing assessment rubrics for student expectations for group work, research and presentations. A self (4.3 Self-Assessment Checklist) and group (4.4 Group Assessment Checklist) is also provided.

Providing Time for Research and Preparation

There are a number of supplementary materials provided in addition to the film. All of these materials are provided on the website at www.greatbearsea.net. Transcripts of the videos are also provided on the website or the Great Bear Sea USB. These are helpful tools for accessing information quickly and in quoting information.

Adjust the number of recommendations appropriately to accommodate for the number of students in your class so that each student is responsible for researching and presenting at least one recommendation (or perspective).
Facilitating the Meeting

Here are some ideas for preparing for, and facilitating the meeting:

- Establish a set of “ground rules” for the meeting, including when and how long groups/students will have to share their recommendations, how and when others should respond, the order of presentations, etc.
- Consider using a Talking Circle approach, to encourage respectful and active listening. See www.firstnationspedagogy.ca/circletalks.html for guidance.
- Set up the room to model an interactive meeting, where students can face each other (circle or boardroom style). Consider holding the meeting in a larger space, away from the classroom if desired.
- As the facilitator, formally open the meeting, reinforcing the ground rules and introducing the session. A potential script could be:

  Home to First Nations for thousands of years, the Great Bear Sea is a wild expanse of ocean where whales and marine life, wolves, bears and humans thrive in rich coastal ecosystems. The Great Bear Sea is also a place where worlds collide – a place full of historic conflicts and looming battles over ocean resources. We are gathered here today to plan for our future – to build regional plans that will protect this region and to build sustainable coastal economies. All voices will be heard and all perspectives will be considered.

- After presenting their points, have students post their chart paper with the listed recommendations around the room. Consider holding a “clarification session” following all presentations, whereby students can ask questions about any of the recommendations and both the presenter and others can help address questions to clarify.

Prioritizing Recommendations

During the second part of the meeting, students take on the role of the decision-makers (in the MaPP, this is the 18 First Nations and the Province of British Columbia) and consider how they might go about prioritizing the recommendations in order to formulate the regional plans.

As an exercise for students to think about informed decision-making, the role of the class may be to come up with the five most important recommendations to be considered in formulating the regional plans. While real planning and decision-making is, of course, much more nuanced and complex, the activity will give students the chance to see how research, rationales and multiple perspectives are important in decision-making.

Here are some strategies to consider in facilitating this portion of the meeting:

- In the role of decision-makers, have the students review the recommendations and rationale suggested for each region (or choose one or two to focus on as a class). Provide students with 3 different coloured tabs or other stickers, and denote the
colours as “Low,” “Medium” or “High” priority. Have students place their stickers beside the recommendations for the region, and then as a class, rank them and determine the five most important recommendations.

• To make this more manageable, decide on one region that you will focus on as a class.

• To make this more complex, have students continue in role-play, with the original Advisory Members for one region becoming the Partners (First Nations/government) for another. Keep the task to determining the five most important recommendations, but have the Advisory Committee Members answer questions from the Partners in order to rationalize their recommendations.

• Have the class determine other methods for how determine the five most important recommendations for each region.
### 4.1: Regional Perspectives Viewing Guide

<table>
<thead>
<tr>
<th>Describe the perspective or knowledge shared.</th>
<th>Who is sharing the knowledge? Consider any groups or communities they belong to.</th>
<th>What is the geographic, ecological, economic and/or social/cultural significance of the knowledge for future marine planning?</th>
<th>Rate the level of importance you think this has for future planning (low, medium, high) and why.</th>
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<tbody>
<tr>
<td><strong>Example:</strong> Ancient Clam Gardens provide Traditional Ecological Knowledge that we can learn from to plan for future.</td>
<td>First Nations of the Kwakwaka’wakw.</td>
<td>Clam gardens have cultural value to First Nations, provide food, and provide income (fishery).</td>
<td>High – Traditional Ecological Knowledge like this can help guide future planning. Protection of these areas is important for science and culture.</td>
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<tr>
<td>Describe the perspective or knowledge shared.</td>
<td>Who is sharing the knowledge? Consider any groups or communities they belong to.</td>
<td>What is the geographic, ecological, economic and/or social/cultural significance of the knowledge for future marine planning?</td>
<td>Rate the level of importance you think this has for future planning (low, medium, high) and why.</td>
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## 4.2: Developing Regional Recommendations

### Group Members:

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<th>Name of Presenter</th>
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<tr>
<th>Name of Presenter</th>
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<th>Region:</th>
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### Instructions:

Develop a set of recommendations that reflect the perspectives, opinions and needs of the region you are researching, and promote the need to keep the Great Bear Sea a viable ecosystem for generations to come. Each group member should present at least 1 recommendation during the Mock Regional Planning Meeting. Make the recommendations easy to understand and straightforward (1-2 sentences maximum). For example, a recommendation could be: Sensitive areas (like ancient clam gardens) should be designated as protected areas. Be sure to reference the film clips or other resources used for your rationale. You may wish to list the name of a specific person or organization and provide a quote if this is helpful.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
<th>Name of Presenter</th>
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<tr>
<td>Name of Presenter</td>
<td>Rationale</td>
<td>Recommendation</td>
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# 4.3: Self-Assessment Checklist

For each statement, please rate your participation and contribution to the group activity. For each question, include an example of your contribution or what you wish to work on for next time.

1 = I need to work on this area.  
2 = I did ok in this area.  
3 = I excelled in this area.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Example or wish for next time:</th>
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<tbody>
<tr>
<td>I was ready to work and remained focused on the task.</td>
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<tr>
<td>I shared my ideas and opinions.</td>
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<tr>
<td>I listened attentively and respectfully to others’ ideas and opinions.</td>
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<td>I accepted constructive feedback and provided the same to others when possible.</td>
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<td>When faced with challenges, I contributed to problem solving in order to complete tasks.</td>
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<tr>
<td>I did my fair share of the work during the activity.</td>
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Other comments or suggestions for future learning:
Name: __________________________

4.4: Group Assessment Checklist

Group Members’ Names:

As a team, please rate the way the group worked together, and then complete the questions.

1 = We need to work on this area.
2 = We did ok in this area.
3 = We excelled in this area.

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<tr>
<th></th>
<th>1</th>
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<tr>
<td>We were ready to work and remained focused on the task.</td>
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<tr>
<td>We encouraged each other to share ideas and opinions.</td>
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<td>We listened attentively and respectfully when individuals were sharing.</td>
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<tr>
<td>All members were involved in decision-making.</td>
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<tr>
<td>When faced with challenges, we worked as a team to find strategies to complete the tasks.</td>
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Describe one thing your group did really well:

Describe one thing your group could improve for next time, and the strategy you might use:
Lesson 5: Planning for the Future of the Great Bear Sea

Overview: Students will reflect on the experience of engaging in the Mock Regional Planning Meeting and share their questions and observations. They will be asked to consider the value of planning for the future and explore an area of interest through a summative project.

Suggested Time: 1 session (75 minutes) + additional for summative projects

*Teacher Note: Materials with a * are available on the Great Bear Sea USB, or at www.greatbearsea.net.

Materials and Resources:
• Computer, projector and screen
• Lesson 5 Film Clips:
  □ SEAS1 (3 mins)
  □ Coastal Guardian Watchmen (12 mins)
  □ Protected Areas Overview (2 mins)
  □ SEAS2 (3 mins) – optional
• Teacher Background – Lesson 5
• Featured Career Biographies*

Learning Objectives:
Students will:
1. Reflect on processes of collaboration and identify challenges and solutions to effective collaborative planning processes.
2. Assess how prevailing conditions and the actions of individuals and groups affect events, decisions, and developments (cause and consequence)
3. Use social studies inquiry process skills to address an issue/question/concern of own choosing, related to prior learning around marine planning and the Great Bear Sea.
Lesson Context

This lesson provides students with an opportunity to debrief the Mock Regional Planning Meeting and to review the processes of forming rationales, presenting information and collaboration. Several questions and ideas are suggested for small and large group discussion. Students also consider the consequences of not planning, and how that may impact the communities involved as well as others in the province. This is also an opportunity to have a discussion about the history of colonization, and how First Peoples’ voices and perspectives were silenced or not given due consideration. This could lead to a discussion around Truth and Reconciliation, and the activities currently underway in Canada and BC to address colonization.

As a summative project, and using the established recommendations from Lesson 4, Activity 3 suggests a number of options to consider for further self-study. These are intended to take a personal inquiry-based approach, whereby students can engage in a question, concern or issue of interest moving forward. Providing both choice in topic and type of project may increase student engagement and encourage following a line of inquiry that is relevant to them personally.

Learning Activities

Activity 1: Mock Planning Meeting Debrief (30 minutes)

1. Have students form small groups (different than the groups they worked with in Lesson 4) and spend time debriefing the Mock Regional Planning Meeting experience. Students should be prepared to share one explanation, observation or question from their experience with the large group.

2. As a large group, address questions raised by students and discuss as a class. Consider facilitating a discussion around some of these questions:
   - What did you find most rewarding?
   - What did you find most challenging about the meeting? What would you do differently next time?
   - Do you feel that all voices were heard equally? Why or why not?
   - Were there any voices missing? How might they have been included?
   - In terms of the Great Bear Sea, whose voices do you feel are most important? Should some voices/perspectives hold more weight than others? Why?
   - Where do you see this type of planning applying to other situations (locally, provincially, nationally, globally)?
   - As we learned through looking at the Marine Planning Partnership, each region now has a plan for moving forward. What issues, concerns, or questions do you think will need to be addressed next?
Activity 2: What Happens Next? (45 minutes)

1. Ask students if they can think of a policy or law that exists, but may not be followed consistently. Some responses may include:
   - Wearing a bicycle helmet
   - Speeding
   - Distracted driving (cell phones)
   - Lawn watering restrictions in the summer
   - Some school-based rules and policies

2. What are some potential consequences to people choosing not to follow the laws or policies, or when there is a lack of enforcement? (i.e. harm to self, others and environment, fines, lack of leadership and role models, etc.). Have students also consider how people have changed their behaviour to more effectively respond to laws that existed but perhaps were not generally being followed (i.e. the reduction in drinking and driving behaviour in the last few decades). What mechanisms exist to help change behaviour (such as campaigns, advocacy, new legislation, etc.)?

3. Have students brainstorm what may have to be monitored and enforced in following the Great Bear Sea marine plans. How do we ensure follow through for generations to come?

4. As a class, watch the following film clips, and discuss how formal and informal means of leadership might contribute to sustainability:
   - SEAS1
   - Coastal Guardian Watchmen
   - Protected Areas Overview
   - SEAS2 (optional)

Activity 3: Summative Projects (ongoing)

1. Present some options for summative projects and provide choice for students to engage in topic areas and project type. Some suggestions include:
   - Action Plan for the Great Bear Sea. This might include a focus on a specific ecological, economic, social/cultural or geographic situation, or relate to one or more regions.
   - There are many development projects that have been put forth for the North Coast including pipelines, wind farms, refineries, liquefied natural gas (LNG) projects, etc. These development projects may create jobs but also may impact ecosystems. Look closely at one or more of the current development projects proposed for the Great Bear Sea region, and form opinions on how development...
should proceed based on your learning in the film.

- Many jobs depend upon the resources of the Great Bear Sea ecosystem. In order to maintain sustainability (healthy ecosystems and jobs for people in the community), economic needs and ecosystem needs both need to be considered in planning for the future. Explore the role of marine plans in helping to advocate for sustainable job development.
- Artefact and artist statement exploring the significance of one aspect of the Great Bear Sea, with research into one or more particular First Nation cultures.
- Position statement: Is marine planning in British Columbia (or Canada) necessary? Use an example from a local context to explain your position.
- Exploring Marine Protected Areas and their significance in BC and Canada.
- Comparing marine planning with the Great Bear Sea to other parts of Canada or the world.
- Allow students to provide alternative suggestions.

2. In pairs or small groups, have students brainstorm topic and project ideas. Considering grouping students in like-minded topic groups for further discussion and brainstorming.

**Extension Ideas**

- Refer to the First Peoples’ Principles of Learning and other resources for more suggestions on embedding a First Peoples’ worldview into your teaching practice (see www.fnesc.ca/learningfirstpeoples/).
- Share the Truth and Reconciliation report and calls to action with students and engage in further learning in this area.
- See **Featured Career Biographies** and have students explore a variety of career options related to marine planning and stewardship.

**Assessment Ideas**

- Formatively assess students’ engagement in group work and large group discussion.
- Assess the summative projects for each student.
Teacher Background – Lesson 5

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 can allow for fish and marine life restoration, increasing both the size and number of species, and protecting species in critical stages of the life cycle.

MPAs can also act as a baseline for research purposes, to judge management processes in nearby areas. To date, Canada has just over 60,000 km² of protected oceans and lakes. In June 2010, Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site (3500 km²) in British Columbia (in the region of the Great Bear Sea) 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.

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.
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:

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.
Appendix A: 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
cought 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, 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 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 that 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.
Appendix B: Indigenous Knowledge

The following is an excerpt from:


The full resource can be found at www.fnesc.ca.

Indigenous Knowledge

What is Indigenous knowledge, and how can it be brought into science classes? This section looks at important concepts in understanding Indigenous knowledge, the importance of Interconnectedness, Sense of Place, Language, Place Names, Story and Traditional Ecological Knowledge.

Interconnectedness

First Peoples are diverse, and the unique knowledge each group holds is part of their individual worldviews. However, they share a common belief that we are all connected to nature and to each other. This notion that we are all connected with everything in the world is expressed by many First Peoples in the phrase “All my relations.”

Inherent in this view of the world is the understanding that everything in the universe has a place there and deserves respect. From this vantage point, people view their relations with others as well as the natural world differently than someone who only sees it through a microscope or telescope.

Sense of Place

Connection with place, with the land, is the foundation of Indigenous Knowledge. This means that each Indigenous group holds unique world views, technologies and pedagogies according to their environment and territories. Indigenous knowledge, passed on through the generations, was essential for survival. Survival for First Peoples depended on and depends on their particular knowledge of the land, their unique relationship with the environment, and their shared values and practices through which they made sense of the world.

The concept of Place goes far beyond the physical space. It includes a crucial Sense of Place, the memories, emotions, histories, spiritualities that bind the people to the land.

Five concepts of place have been identified, common to most First Peoples⁴:

• Place is multidimensional. More than the geographical space, it also holds cultural, emotional and spiritual spaces which cannot be divided into parts.

• Place is a relationship. All life is interrelated.

⁴ Adapted from Michell et al., Learning Indigenous Science From Place, p. 27-28.
• Place is experiential. Experiences a person has on the land give it meaning.

• Place is local. While there are commonalities, each First Nation has a unique, local understanding of Place.

• Place is land-based. Land is interconnected and essential to all aspects of culture.

Making connections with place in science curricula is an integral part of bringing Indigenous science into the classroom. That means including experiential learning in local natural and cultural situations.

**Language**

Language is the vessel that contains Indigenous knowledge. Understanding is embedded in language, and knowledge is structured and transmitted through language. Learning through oral language is part of its experiential nature.

Through the processes of colonization, First Nations languages have undergone attack. Most communities suffered significant language loss, and one of the results of the loss of language is the loss of knowledge. As well, learning has moved from the oral to the written.

Some languages face extinction, but others are experiencing renewal. People are working to revitalize languages which in turn will serve to keep traditional knowledge alive.

Like most languages, strong Indigenous languages continue to grow and sometimes new words have been added to the language for contemporary objects. For example, in the Ts’msyen language Sm’algyax, the word flashlight is *laawksm ts’amti* (light lightning or lightning from a light). In Tsilhqot’in, the word for helicopter is *betšit’ay naghedalt’ex* (Something that has something spinning on top of it.)

Incorporating traditional languages into experiential science activities wherever possible is an important part of bringing Indigenous Science into the classroom. There may be local community language resources in the school or community to support this. An online source that students can access is firstvoices.com which gives students searchable vocabularies in many of BC’s diverse First Nations languages.

**Place Names**

Traditional place names provide information about First Peoples and their relationship with the land. Traditional knowledge is often embedded in place names. Paying attention to the name of places in traditional territories can lead to a wealth of information about local ecosystems, land use or plant and animal behaviour.

Many First Nations communities have documented the traditional place names of their traditional territories and they may be available as a classroom resource. However, some place names may be considered private and to be used only by community members.
Story

Story is one of the main methods of traditional Indigenous learning and teaching. Combining story and experience is a powerful strategy that has always been used by First Peoples, and its power can also be brought to the science classroom.

Stories enable holistic learning. They meld values, concepts, protocol, practices and facts into a narrative. They also develop important skills of listening and thinking.

Story can be an important part of the science curriculum. Oral storytelling can be incorporated by inviting First Nations storytellers into the class, or the teacher can read a written version of a traditional story where appropriate. Reading published stories that are relevant to the science class can integrate with English Language Arts, or where First Nations languages are taught.

Traditional Ecological Knowledge

Traditional Ecological Knowledge, or TEK, is the most popular term to denote the vast local knowledge First Peoples have about the natural world found in their traditional environment. As with the definition of science, there are differing meanings of TEK. Sometimes the term is expanded as Traditional Ecological Knowledge and Wisdom. Other terms used are Aboriginal Traditional Knowledge, Naturalized Knowledge Systems, local knowledge, and Indigenous Knowledge. Some view TEK as a construct of other contemporary sciences. Others fear the word “traditional” suggests the knowledge is stuck in the past, where in fact it is dynamic and continually being renewed.

TEK is widely used in biological and environmental sciences, and is largely considered to be complimentary to, and equivalent with, Western scientific knowledge. The environmental knowledge of generations is important to fields such as resource management, climate change and sustainability. For example, at the federal level, an ATK subcommittee reports to the Committee on the Status of Endangered Wildlife in Canada which make recommendations to the Minister based on TEK in their own local regions on species that may need to be listed.

TEK is, above all, local knowledge based in people’s relationship to place. It is also holistic, not subject to the segmentation of contemporary science. Knowledge about a specific plant may include understanding its life cycle, its spiritual connections, its relationship to the seasons and with other plants and animals in its ecosystem, as well as its uses and its stories.

It is important to recognize that TEK is the intellectual property of the First Nations who hold it. Many people share much of their knowledge with others, but there is other knowledge and wisdom that is considered private and is not shared.