

**Resources K-3:**

<b>Resource Name</b>	<b>Organization</b>	<b>Description</b>	<b>URL</b>	<b>OL Principles</b>
Stream to Sea Program	Fisheries and Oceans Canada	Education Program that includes resources and curriculum for all grade levels to help students understand, respect and protect local watersheds, from stream to sea (also available in French).	<a href="http://www.StreamtoSea.ca">www.StreamtoSea.ca</a>	1-7
Salmon Run Field Day	TeachBC	Lesson plan for an interactive field trip focusing on intertidal zones and salmon habitat	<a href="https://teachbcdb.bctf.ca/permalink/resource925">https://teachbcdb.bctf.ca/permalink/resource925</a>	4,6,

**Resources 4-6:**

<b>Resource Name</b>	<b>Organization</b>	<b>Description</b>	<b>URL</b>	<b>OL Principles</b>
Stream to Sea Program	Fisheries and Oceans Canada	Education Program that includes resources and curriculum for all grade levels to help students understand, respect and protect their local watershed from stream to sea	<a href="http://www.StreamtoSea.ca">www.StreamtoSea.ca</a>	1-7

		(also available in French).		
Ontario's Oceans	Biodiversity Education and Awareness Network (BEAN)	A curriculum package for Ontario students to foster a connection with marine biodiversity as a multi-disciplinary topic	<a href="http://biodiversityeducation.ca/wp-content/uploads/2016/08/Ontarios-Oceans-Conserving-Canadas-Marine-Biodiversity2.pdf">http://biodiversityeducation.ca/wp-content/uploads/2016/08/Ontarios-Oceans-Conserving-Canadas-Marine-Biodiversity2.pdf</a>	5,6
Exploring the ocean	Canadian Geographic	Lesson plan introducing students to the diversity of life in the Northwestern Pacific Ocean and initiates students into the world of research	<a href="http://www.cangeoeducation.ca/resources/learning_centre/matrix.asp">http://www.cangeoeducation.ca/resources/learning_centre/matrix.asp</a>	5
Shouting Whales	Province of British Columbia	A comprehensive marine teaching resource which features the marine soundscape, life of marine mammals and more	<a href="http://openschool.bc.ca/shouting_whales/index.html">http://openschool.bc.ca/shouting_whales/index.html</a>	1,5,6

Ocean Education	National Geographic Society	A collection of educator resources centred around human interaction with oceans	<a href="http://nationalgeographic.org/education/programs/oceans-education/">http://nationalgeographic.org/education/programs/oceans-education/</a>	1,2,3,5,6
School-Based Weather Station Network	School-Based Weather Station Network	Database of weather data from schools over Vancouver Island with associated activities and lesson plans	<a href="http://www.islandweather.ca/">http://www.islandweather.ca/</a>	3
SeaChoice Sustainable Seafood	Sierra Club BC	Teaching kit designed to help teachers educate their students	<a href="http://sierraclub.bc.ca/wp-content/uploads/2015/08/SeaChoiceKit_K-6.pdf">http://sierraclub.bc.ca/wp-content/uploads/2015/08/SeaChoiceKit_K-6.pdf</a>	2,5,6,

		about the value of the oceans and marine conservation issues, with a focus on the global fisheries crisis.		
Science First Peoples	FNESC	A teacher resource guide to integrate non-appropriated traditional ecological knowledge into the curriculum	<a href="http://www.fnesc.ca/science-first-peoples/">http://www.fnesc.ca/science-first-peoples/</a>	3, 6
Ducks in the Flow: Resources about Surface Ocean Currents	Windows to the Universe	A storybook and classroom activities where students work collaboratively to explore and investigate surface currents found in the ocean and the Great Lakes	<a href="http://www.windows2universe.org/teacher_resources/ocean_education/currents_main.html">http://www.windows2universe.org/teacher_resources/ocean_education/currents_main.html</a>	1,2
Coral Reefs Web Quest	Canadian Geographic	Lesson plan introducing students to coral reef ecosystems	<a href="http://www.cangeoeducation.ca/resources/learning_centre/lesson_plans_docs/oceans/BC_M_Coral_Reefs.pdf">http://www.cangeoeducation.ca/resources/learning_centre/lesson_plans_docs/oceans/BC_M_Coral_Reefs.pdf</a>	1,5,6
Aboriginal Highways	Canadian Geographic	Lesson plan overviewing aboriginal peoples use of oceans for transportation	<a href="http://www.cangeoeducation.ca/resources/learning_centre/lesson_plans_docs/oceans/BC_E_Aboriginal.pdf">http://www.cangeoeducation.ca/resources/learning_centre/lesson_plans_docs/oceans/BC_E_Aboriginal.pdf</a>	6
Salmonids in the Classroom Intermediate	Fisheries and Oceans Canada (DFO)	This resource includes lessons (grade 4-7) on salmon migration and survival in the ocean and estuary, salmon fisheries and	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/sicintermediate-secintermediaire-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/sicintermediate-secintermediaire-eng.html</a>	4,5,6

		watershed studies (English & French).		
Salmonid Classroom Incubation Program	Fisheries and Oceans Canada (DFO)	Students raise local salmon from egg to fry and release them back into their stream of origin, learning about salmon life cycle and local watershed.	<a href="http://www.pac.dfo-mpo.gc.ca/education/resources-ressources-eng.html">http://www.pac.dfo-mpo.gc.ca/education/resources-ressources-eng.html</a>	5,6
Storm Drain Marking Program	Fisheries and Oceans Canada (DFO)	Student/community groups paint yellow fish on road next to storm drains to remind us that all drains lead to salmon habitat (stream to sea); outreach messages and materials included to reduce stormwater pollution.	<a href="http://www.pac.dfo-mpo.gc.ca/education/stormdrain-collecteur-eng.html">http://www.pac.dfo-mpo.gc.ca/education/stormdrain-collecteur-eng.html</a>	5, 6
Bioaccumulation: A case study of British Columbia's killer whales	Fisheries and Oceans Canada (DFO)	Five related lessons where students learn about the natural history of British Columbia's killer whale populations and the threats they face (English & French).	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/whale-epaulard-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/whale-epaulard-eng.html</a>	2,5, 6
Endeavour hydrothermal vents: Canada's first marine protected area	Fisheries and Oceans Canada (DFO)	Grades 4 -11; class discussions, research, and activities to learn about deep sea biodiversity, Canada's Endeavour Hydrothermal vent site and it's designation as a Marine Protected Area (English &	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html</a>	1, 5, 6, 7

		French).		
Turn down the volume! : The impact of sound on Harbour Porpoise	Fisheries and Oceans Canada (DFO)	Explore connectivity between the marine environment and humans by learning about the impact of sound on harbour porpoise and student empowerment to make a difference (English & French)	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/porpoise-marsouin-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/porpoise-marsouin-eng.html</a>	5, 6
Where the land meets the sea: the nearshore	Fisheries and Oceans Canada (DFO)	Lesson plan (grade 4-11) about marine nearshores and some of their inhabitants (eelgrass and forage fish); English & French.	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html</a>	1, 5, 6
Fisheries Careers for First Nations - British Columbia	Fisheries and Oceans Canada (DFO)	An exploration of traditional and modern fisheries stewardship, related careers and how to direct a career path toward these jobs (English & French).	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/carriere-halierie-career-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/carriere-halierie-career-eng.html</a>	6

Resources 7-9:

Resource Name	Organization	Description	URL	OL Principles
Stream to Sea Program	Fisheries and Oceans Canada	Education Program that includes curriculum and	<a href="http://www.StreamtoSea.ca">www.StreamtoSea.ca</a>	1-7

		resources to help students understand, respect and protect local watersheds, from Stream to Sea (also available in French).		
Ocean Sense	Ocean Networks Canada	Selection of resources that explores various oceanographic principles and interweave western science with Indigenous ways of knowing.	<a href="http://www.oceannetworks.ca/learning/ocean-sense/teacher-info">http://www.oceannetworks.ca/learning/ocean-sense/teacher-info</a>	5,6,7
Ocean Observatories Lesson	Ocean Networks Canada	Lesson plan using real ocean data to teach data analysis techniques and foster critical thinking using data sources	<a href="http://www.oceannetworks.ca/learning/resources/educator-resources/ocean-observatories-lesson-interpreting-data">http://www.oceannetworks.ca/learning/resources/educator-resources/ocean-observatories-lesson-interpreting-data</a>	7
Creating a better climate future for B.C.	Sierra Club BC	A toolkit that outlines ten steps for creating a future with a healthy, stable climate	<a href="http://sierraclub.bc.ca/wp-content/uploads/Teacher-Toolkit_Creating-a-better-climate-future-for-B.C..pdf">http://sierraclub.bc.ca/wp-content/uploads/Teacher-Toolkit_Creating-a-better-climate-future-for-B.C..pdf</a>	1,3,4,6
The Carbon Cycle Game	Sierra Club BC	A game that illustrates the role oceans and marine life have in carbon storage and climate.	<a href="http://sierraclub.bc.ca/wp-content/uploads/2015/08/Carbon-cycle-game-stamps.pdf">http://sierraclub.bc.ca/wp-content/uploads/2015/08/Carbon-cycle-game-stamps.pdf</a>	1,3,4,6
Educational Learning Resource: Climate Change	Sierra Club BC	A teacher's guide for educating students about climate change in an interactive and	<a href="http://sierraclub.bc.ca/wp-content/uploads/2015/08/climate-change-learning-resource.pdf">http://sierraclub.bc.ca/wp-content/uploads/2015/08/climate-change-learning-resource.pdf</a>	1,3,4,6

		engaging manner		
Melting Ice	PBS Learning Media	A lesson plan regarding the role of melting ice on changing climate, loaded with video and media supplements	<a href="https://www.pbslearningmedia.org/resource/ipy07.science.watcyc.lpmeltingice/melting-ice/#.WMqnzPnyvIV">https://www.pbslearningmedia.org/resource/ipy07.science.watcyc.lpmeltingice/melting-ice/#.WMqnzPnyvIV</a>	1,2,3,4,5,6
Ocean Acidification Inquiry	Patrick Wells - Science Teacher/Researcher	A lesson is to help students make connections between the physical change in ocean water and the over production of carbon dioxide by burning fossil fuels.	<a href="http://patrickwells.blogspot.ca/2017/04/ocean-acidification-inquiry-activity.html">http://patrickwells.blogspot.ca/2017/04/ocean-acidification-inquiry-activity.html</a>	3,6,
Exploring the Great Bear Sea	Great Bear Sea	Curriculum resources exploring a variety of themes such as Indigenous Knowledge, collaborative science, marine planning and stewardship	<a href="http://greatbearsea.net/">http://greatbearsea.net/</a>	1,5,6
Bamfield MSC Field Trips	Bamfield Marine Sciences Centre	Immersion ocean and coastal science field trips	<a href="http://www.bamfieldmssc.com/education/educators">http://www.bamfieldmssc.com/education/educators</a>	1,4,5,6
Ocean Literacy	Ocean Wise	Online courses for elementary, middle school and high school students guiding them through the 7 principles of ocean literacy	<a href="https://education.ocean.org/">https://education.ocean.org/</a>	1,2,3,4,5,6,7
Wetland Resources for Teachers - in class, online, and in the field	Ducks Unlimited	Resource site for all of DUCs Education resources. Includes Saltmarsh lesson plans for grades	<a href="http://www.ducks.ca/resources/educators/">http://www.ducks.ca/resources/educators/</a>	2,3,5,6

		7-9, online elementary level Duck Detectives game that allows students to track duck migrations across North America, in-class teaching guides focused on different types of wetlands, and a guide to conducting your own wetland field trip.		
Endeavour hydrothermal vents: Canada's first marine protected area	Fisheries and Oceans Canada (DFO)	Grades 4 -11; class discussions, research, and activities to learn about deep sea biodiversity, Canada's Endeavour Hydrothermal vent site and it's designation as a Marine Protected Area (English & French).	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html</a>	1, 5, 6, 7
Where the land meets the sea: the nearshore	Fisheries and Oceans Canada (DFO)	Lesson plan (grade 4-11) about marine nearshores and some of their inhabitants (eelgrass and forage fish); English & French.	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html</a>	1, 5, 6
Fisheries Careers for First Nations - British Columbia	Fisheries and Oceans Canada (DFO)	An exploration of traditional and modern fisheries stewardship, related careers and how to direct a career path toward these jobs (English & French).	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/carriere-halierie-career-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/carriere-halierie-career-eng.html</a>	6



Resources 10-12:

Resource Name	Organization	Description	URL	OL Principles
Stream to Sea	Fisheries and Oceans Canada	Education program that includes resources and curriculum for all grade levels to help students understand, respect and protect local watershed, from Stream to Sea (also available in French).	<a href="http://www.StreamtoSea.ca">www.StreamtoSea.ca</a>	1-7
Inuit Observations on Climate Change	International Institute for Sustainable Development	A teacher's guide for a film exploring climate change from an Inuit perspective	<a href="http://www.edu.gov.mb.ca/k12/docs/support/sila_video/">http://www.edu.gov.mb.ca/k12/docs/support/sila_video/</a>	5
Through Mala's Eyes	Indian and Northern Affairs Canada	A series of lesson plans to foster appreciation of Inuit culture and lifestyles	<a href="http://publications.gc.ca/collections/collection_2011/ainc-inac/R2-240-2003-eng.pdf">http://publications.gc.ca/collections/collection_2011/ainc-inac/R2-240-2003-eng.pdf</a>	6
Water, Water Everywhere	Polar Husky	Full unit lesson plan to learn about the importance of water from an Inuit perspective	<a href="http://www.polarhusky.com/2004/curriculum/units/unit08.pdf">http://www.polarhusky.com/2004/curriculum/units/unit08.pdf</a>	1,6
Endeavour hydrothermal vents: Canada's first marine protected area	Fisheries and Oceans Canada (DFO)	Grades 4 -11; class discussions, research, and activities to learn about deep sea biodiversity, Canada's Endeavour Hydrothermal vent	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/endeavour-eng.html</a>	1, 5, 6, 7

		site and it's designation as a Marine Protected Area (English & French).		
Where the land meets the sea: the nearshore	Fisheries and Oceans Canada (DFO)	Lesson plan (grade 4-11) about marine nearshores and some of their inhabitants (eelgrass and forage fish); English & French.	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/nearshore-zone-littorale-eng.html</a>	1, 5, 6
Ecological footprint - How does the way we live affect Earth?	Fisheries and Oceans Canada (DFO)	Secondary activity and discussion using a measurement tool that allows students to calculate and consider the effects of their personal resource use (English & French).	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/empreinte-ecologique-footprint-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/empreinte-ecologique-footprint-eng.html</a>	5, 6
The northern abalone - Species at risk	Fisheries and Oceans Canada (DFO)	Explore the history of the abalone fishery in B.C. with student presentations and an interactive game (with marshmallows!). English and French.	<a href="http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/abalone-ormeau-eng.html">http://www.pac.dfo-mpo.gc.ca/education/lessonplans-lecons/abalone-ormeau-eng.html</a>	4, 5, 6

Resources University:

Resource Name	Organization	Description	URL	OL Principles
Forests for the Future	UBC	A unit lesson plan focussing on First peoples resource	<a href="http://www.ecoknow.ca/documents/tekUnit3.pdf">http://www.ecoknow.ca/documents/tekUnit3.pdf</a>	6

		use on the Northwest coast		
Forests and Oceans for the Future	UBC	A unit lesson plan focussing on First peoples resource use on the Northwest coast		3,6

Everyone/ multimedia resources :

Resource Name	Organization	Description	URL	OL Principles
Digital Fishers	Ocean Networks Canada	A game providing information about biodiversity and environmental factors in the deep sea while collecting data from citizen scientists	<a href="http://www.oceannetworks.ca/learning/get-involved/citizen-science/digital-fishers">http://www.oceannetworks.ca/learning/get-involved/citizen-science/digital-fishers</a>	2,5,7
Ask a Scientist	Government of Canada	A platform to ask a panel of volunteer scientists any question you might have about climate and weather, water and more	<a href="http://science.gc.ca/default.asp?lang=En&amp;n=10CA1F05-1">http://science.gc.ca/default.asp?lang=En&amp;n=10CA1F05-1</a>	3,5,6
Nature Vancouver Intertidal Pamphlet	Nature Vancouver	Identification guide for intertidal animals	<a href="http://naturevancouver.ca/sites/naturevancouver.ca/VNHS%20files/4/Nature_Vancouver_Intertidal_Pamphlet.pdf">http://naturevancouver.ca/sites/naturevancouver.ca/VNHS%20files/4/Nature_Vancouver_Intertidal_Pamphlet.pdf</a>	5
Coastbuster	Ocean Networks Canada	This iPhone or tablet app helps keep Canada's West Coast clean by allowing citizens to report	<a href="https://play.google.com/store/apps/details?id=ca.uvic.beachcomber">https://play.google.com/store/apps/details?id=ca.uvic.beachcomber</a>	1,3,6

		marine debris and notify authorities		
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Sights and Sounds	Ocean Networks Canada	Resource database of underwater videos and hydrophone clips	<a href="http://www.oceannetworks.ca/sights-sounds">http://www.oceannetworks.ca/sights-sounds</a>	5,6,7
Why do whales sing?	TedEd	A short video from TedEd about whale vocalization with a quiz and related online discussions	<a href="http://ed.ted.com/lessons/how-do-whales-sing-stephanie-sardelis">http://ed.ted.com/lessons/how-do-whales-sing-stephanie-sardelis</a>	6
The Nurdles' Quest for Ocean Domination	TedED	A short video about the perils of plastic in the ocean with related online discussion, quiz and additional resources to explore	<a href="http://ed.ted.com/lessons/the-nurdles-quest-for-ocean-domination-kim-preshoff">http://ed.ted.com/lessons/the-nurdles-quest-for-ocean-domination-kim-preshoff</a>	5,6,
Voices of the Canoe	Museum of Anthropology	A website of texts, short films, interviews and photos showing the relationship of First Nations with canoes	<a href="http://www2.moa.ubc.ca/voicesofthecanoe/">http://www2.moa.ubc.ca/voicesofthecanoe/</a>	6
Southern Strait of Georgia	CPAWS BC	A nature guide for the Salish Sea	<a href="http://cpawsbc.org/upload/Island_Tide_centre_insert_final.pdf">http://cpawsbc.org/upload/Island_Tide_centre_insert_final.pdf</a>	1,6
Traditional Nuu-chah-nulth Food Harvesting and Preparation	Guide the Wildside	Information and questions about marine based food used in Nuu-chah-nulth diet	<a href="http://www.guidethewildside.com/resource/Foods-Curr-1.pdf">http://www.guidethewildside.com/resource/Foods-Curr-1.pdf</a>	6
Weather Patterns	NavCanada	Information on regional weather patterns and the connection with the ocean	<a href="http://www.navcanada.ca/EN/media/Publications/Local%20Area%20Weather%20Manuals/LAWM-Atlantic-3-">http://www.navcanada.ca/EN/media/Publications/Local%20Area%20Weather%20Manuals/LAWM-Atlantic-3-</a>	3

			<a href="#">EN.pdf</a>	
Herring School	Tula Foundation: Hakai	TEK & Western Science, stories, videos, kids & elders	<a href="http://www.pacificherring.org/home">http://www.pacificherring.org/home</a>	1,2,3,4,5,6,7
Mobile Programs	<a href="#">Ocean.org</a>	AquaVan + experiential ocean education	<a href="https://education.ocean.org/images/partners/ocean/Ocean-MP.pdf">https://education.ocean.org/images/partners/ocean/Ocean-MP.pdf</a>	1,4,5,6
Public Programs	<a href="#">Ocean.org</a>	Aquatic Cafe is keystone program	<a href="https://education.ocean.org/images/partners/ocean/Ocean-PP.pdf">https://education.ocean.org/images/partners/ocean/Ocean-PP.pdf</a>	
Vic High Marine	Victoria High School	Online videos, pictures and species profiles	<a href="https://www.vichighmarine.ca/">https://www.vichighmarine.ca/</a>	5

International Databases:

<b>Name</b>	<b>Sourced from</b>	<b>URL</b>
Ocean Discover	Global database	<a href="http://oceandiscover.com/">http://oceandiscover.com/</a>
BRIDGES	USA	<a href="http://web.vims.edu/bridge/?svr=1">http://web.vims.edu/bridge/?svr=1</a>
NOAA	USA	<a href="http://www.noaa.gov/resource-collections">http://www.noaa.gov/resource-collections</a>
Sea Change Project	European Union	<a href="http://www.seachangeproject.eu/campaign/sea-change-database">http://www.seachangeproject.eu/campaign/sea-change-database</a>
The PEW Charitable Trusts		<a href="http://www.pewtrusts.org/en/multimedia/video/2016/what-is-ocean-acidification-a-cartoon-crash-course">http://www.pewtrusts.org/en/multimedia/video/2016/what-is-ocean-acidification-a-cartoon-crash-course</a>