



Canadian  
Ocean  
Literacy  
Coalition

La coalition  
canadienne de  
la connaissance  
de l'océan

HIGHLIGHTS REPORT, JUNE 2020

# CANADIAN OCEAN LITERACY SURVEY

## ABOUT THE SURVEY

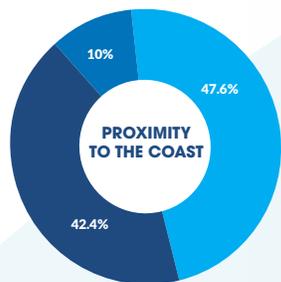
Widely accepted internationally, 'ocean literacy' (OL) is defined as **an understanding of our impact on the ocean and the ocean's impact on us**. The Canadian Ocean Literacy Survey (COLSurvey) was created as part of a larger Canada-wide research initiative led by the Canadian Ocean Literacy Coalition (COLC) to better understand Canadians' varying relationships with the ocean and to examine how OL is understood and practiced across different regions and sectors. The aim of this national study is to establish a baseline *seascape* of OL in Canada, and in so doing, to co-develop an evidence-based national OL strategy and implementation plan.

The COLSurvey was made available to the general public online, as well as distributed throughout the COLC network and beyond to members' respective professional communities, most of whom are directly or indirectly engaged in OL or broader ocean-related work (referred to in this report as "ocean-engaged"). Nanos Research polling also administered a shortened COLSurvey to a random sampling of the Canadian public (referred to in this report as "general public"). These methods complemented the interviews, asset mapping, document scans, youth workshops, and arts-based methods conducted by a team of national and regional coordinators, research assistants, and artists across Canada from September 2019 to March 2020.

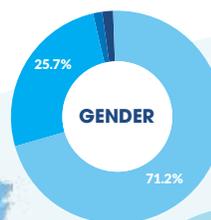
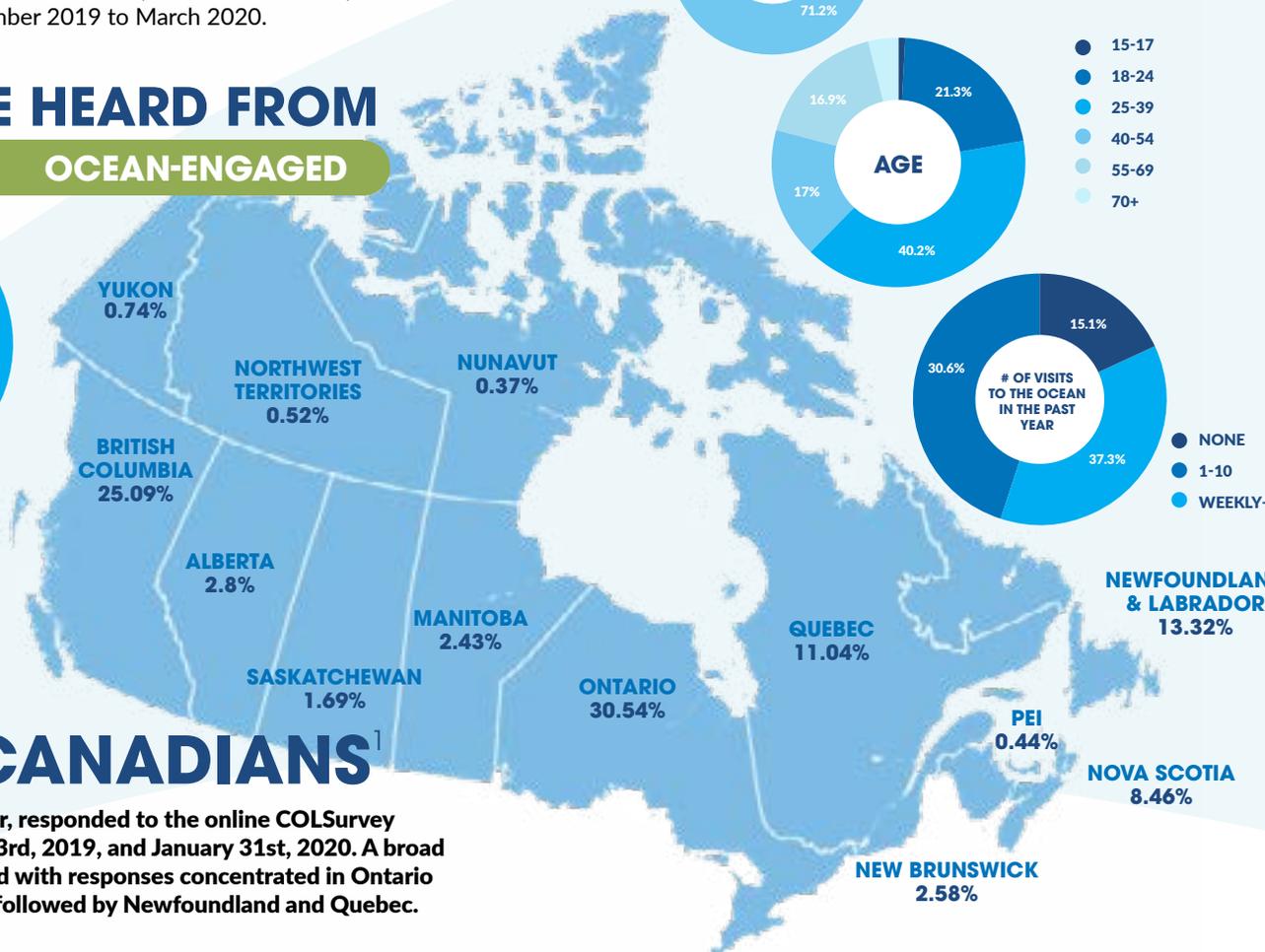
The COLSurvey tool was designed to gauge factors of Canadians' ocean *perceptions* and *values* for both populations sampled as few recent studies have included validated surveys to measure these particular factors in the Canadian context.

For more information on the COLSurvey, Nanos poll, and the survey instrument, as well as findings from the full study, please visit [WWW.COLCOALITION.CA](http://WWW.COLCOALITION.CA)

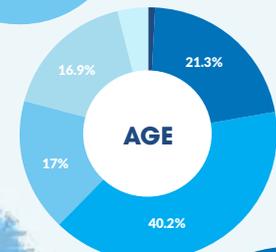
## WHO WE HEARD FROM OCEAN-ENGAGED



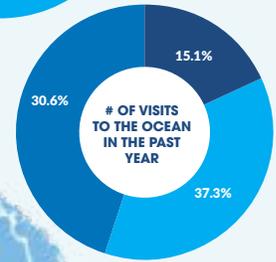
- WITHIN 5KM
- 5KM-100KM
- INLAND



- PREFER NOT TO SAY
- ANOTHER GENDER
- MALE
- FEMALE



- 15-17
- 18-24
- 25-39
- 40-54
- 55-69
- 70+



- NONE
- 1-10
- WEEKLY+

## 1,359 CANADIANS<sup>1</sup>

15 years of age or older, responded to the online COLSurvey between September 23rd, 2019, and January 31st, 2020. A broad geography was reached with responses concentrated in Ontario and British Columbia, followed by Newfoundland and Quebec.

<sup>1</sup> Of the total sample (n=1359) there was an overall completion rate of 89.2%. Response rates varied for each question. 25 of the 26 questions were likert scale or checkbox. The last question was open ended with a completion rate of 25.2%.

This survey highlights report and the entire set of 'Understanding Ocean Literacy in Canada' research reports from the Canada-wide study led by the Canadian Ocean Literacy Coalition is intended for a variety of people and purposes. You may use it in its entirety, or excerpt parts of it, with attribution to the lead authors and the source. **Reprinted with permission from the Canadian Ocean Literacy Coalition, © Glithero, L. and Zandvliet, D. (June 2020), Canadian Ocean Literacy Survey: Highlights Report. Canadian Ocean Literacy Coalition. Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.**

# WHO WE HEARD FROM

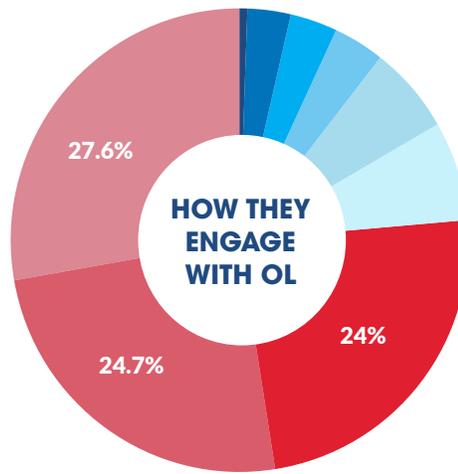
## OCEAN-ENGAGED

NEARLY  
**75%**

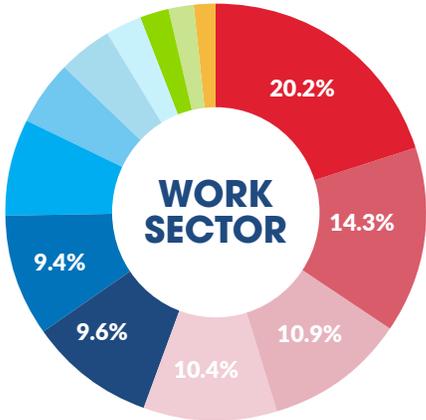
of respondents had a bachelor's degree, college diploma and/or a graduate degree.

LITTLE OVER  
**90%**

of respondents identified as "Canadian," 3.93% as "First Nation, Inuit or Métis", 4.68% as "newcomer (in the last 10 years)," and 5.49% as "other."



- FUNDING PROVISION
- POLICY DEVELOPMENT/IMPLEMENTATION
- OTHER
- WORKFORCE PREPARATION
- MONITORING OR STEWARDSHIP ACTIVITIES
- COLLECTIVE OR COMMUNITY ACTIONS
- EDUCATIONAL PROGRAMMING
- PERSONAL ACTIONS
- KNOWLEDGE SHARING/OUTREACH



- STUDENT
- EDUCATION
- GOVERNMENT
- INDUSTRY/BUSINESS
- OTHER
- NGO
- RESEARCH
- HEALTH & WELL-BEING
- N/A
- SERVICE
- CULTURE/HERITAGE
- COMMUNITY
- MEDIA

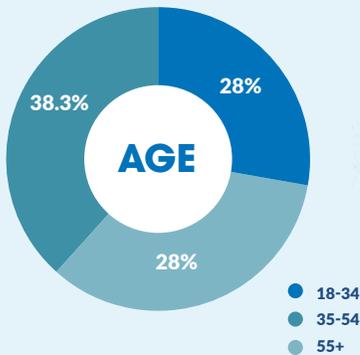
**40.95%**

Did not self-identify as directly engaging with OL initiatives

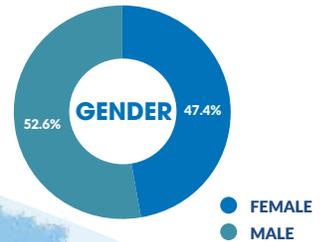
**59.05%**

Self-identified as directly engaging with OL initiatives

## GENERAL PUBLIC



- 18-34
- 35-54
- 55+



- FEMALE
- MALE

**BRITISH COLUMBIA**  
15.15%

**PRAIRIES**  
19.50%

**ONTARIO**  
30.59%

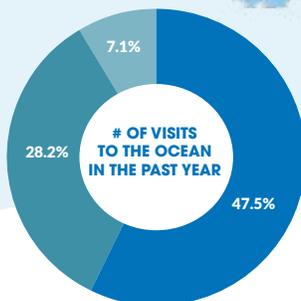
**QUEBEC**  
24.85%

**ATLANTIC**  
9.9%

**1,010 CANADIANS\***

18 years of age or older, participated in a hybrid telephone and online random survey conducted by Nanos Research, between November 29th and December 2nd, 2019, as part of an omnibus survey.

\*As the COLSurvey questions were included as part of a larger omnibus survey being conducted by Nanos Research, fewer questions were asked, and less demographic data was gathered. Respondents' proximity to the coast, work/sector breakdown, and ethnic identity were not asked.

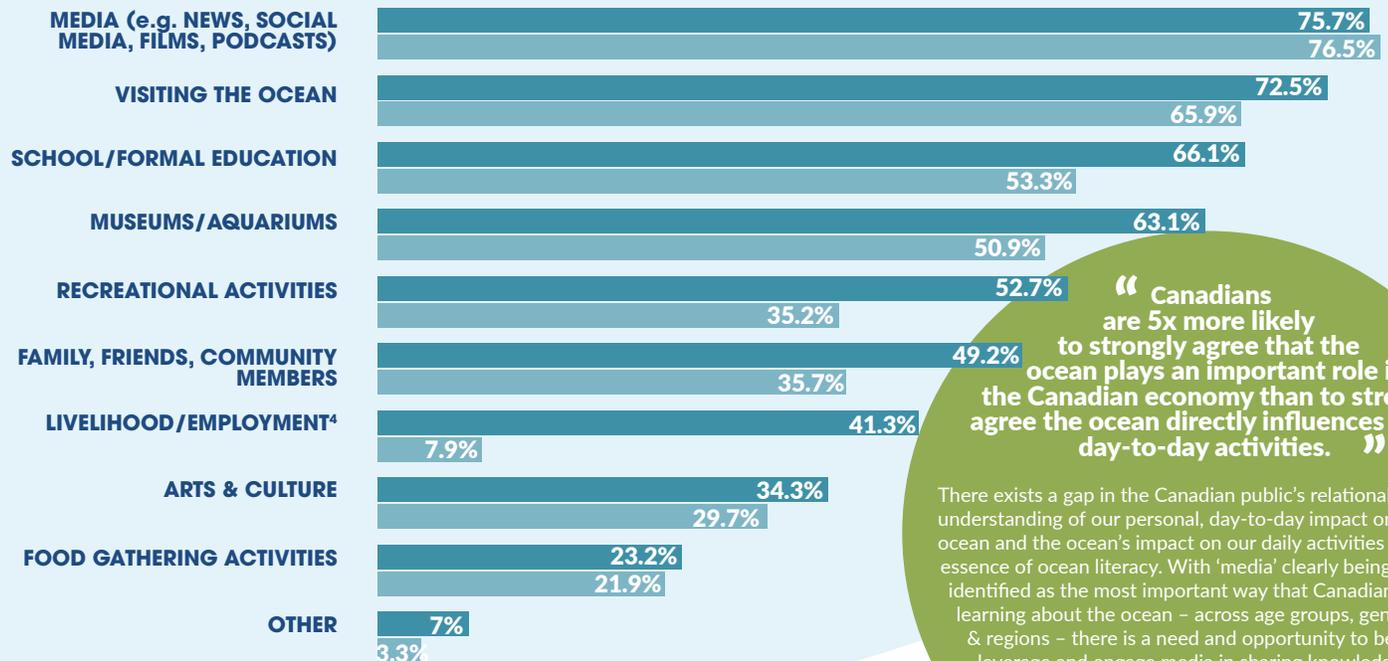


- NONE
- 1-10
- WEEKLY +

# WHAT WE HEARD KEY FINDINGS

## CANADIANS LEARN ABOUT THE OCEAN THROUGH<sup>2</sup>

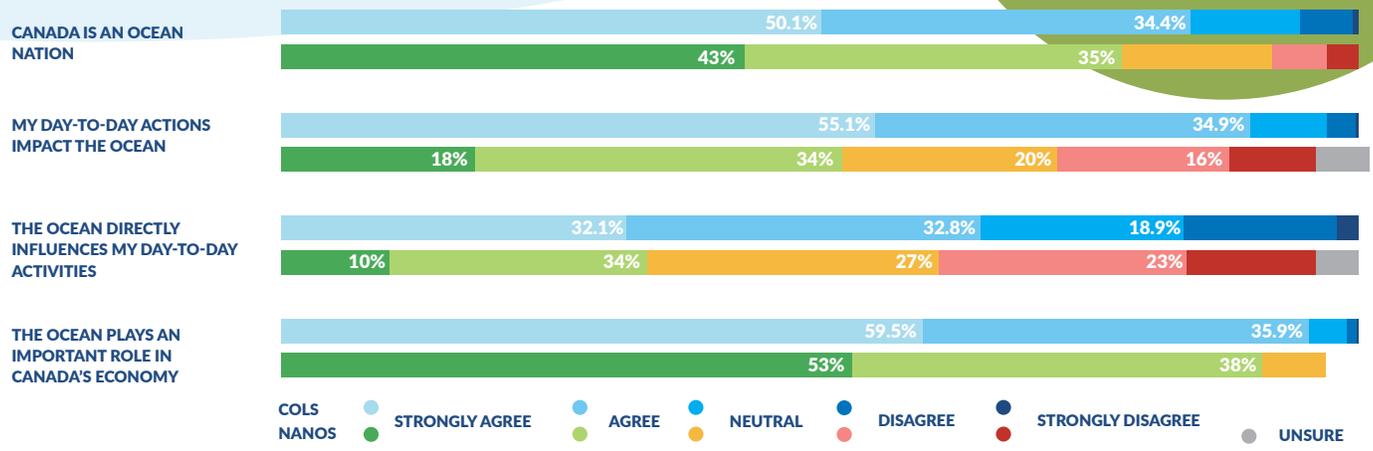
● COLSurvey (OCEAN-ENGAGED) ● NANOS<sup>3</sup> (GENERAL PUBLIC)



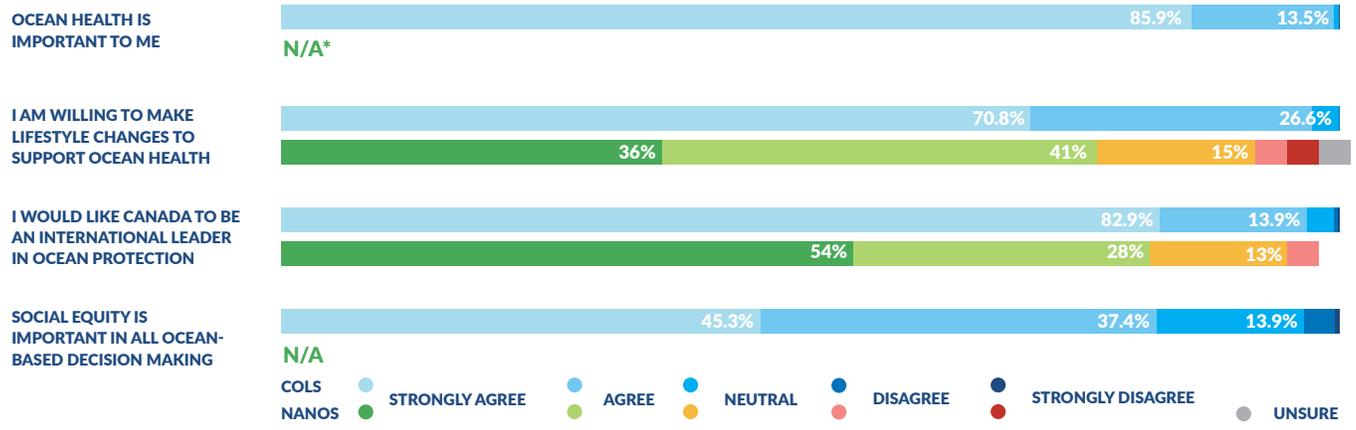
**“ Canadians are 5x more likely to strongly agree that the ocean plays an important role in the Canadian economy than to strongly agree the ocean directly influences their day-to-day activities. ”**

There exists a gap in the Canadian public's relational understanding of our personal, day-to-day impact on the ocean and the ocean's impact on our daily activities - the essence of ocean literacy. With 'media' clearly being identified as the most important way that Canadians are learning about the ocean - across age groups, gender & regions - there is a need and opportunity to better leverage and engage media in sharing knowledge and stories that highlight this inextricable relationship between people and the ocean.

## OCEAN PERCEPTIONS



## OCEAN VALUES



<sup>2</sup> Both COLSurvey and Nanos poll respondents were invited to select multiple options (hence why numbers do not add up to 100%)  
<sup>3</sup> Nanos polling reports confidence in the data within 3.1 percentage points plus or minus, 19 times out of 20.  
<sup>4</sup> This variance makes sense as COLSurvey respondents were largely ocean-engaged professionals. \*N/A appears beside options that were not included in the Nanos poll or alternatively were added by Nanos and thus did not appear on the original COLSurvey.

# WHAT DO CANADIANS VALUE MOST ABOUT THE OCEAN?

OCEAN-ENGAGED ● GENERAL PUBLIC



**LIFE-SUSTAINING**  
(BIODIVERSITY, CLEAN WATER, CLIMATE REGULATION)

94.9% 37.4%



**AESTHETICS & SCENERY**

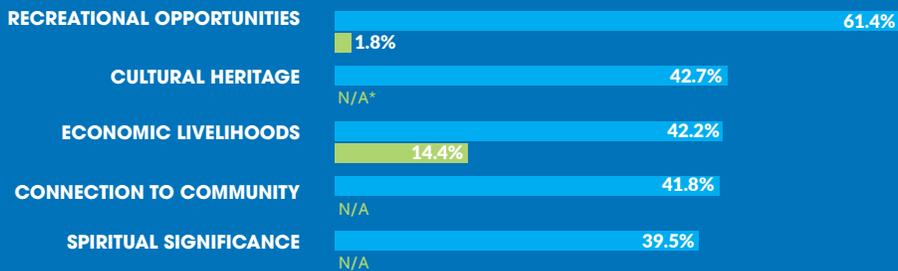
72.4% 15.9%



**HEALTH & WELL-BEING**

71.2% N/A

## NEXT TOP 5 RESPONSES



\*N/A appears beside options that were not included in the Nanos poll or alternatively were added by Nanos and thus did not appear on the original COLSurvey.

**77%**

of the general public 'agrees' or 'strongly agrees' that they are willing to make lifestyle changes to support ocean health.

OVER

**82%**

of the general public identify that they would like Canada to be an international leader in ocean protection – similar findings to the 'ocean-engaged' sample.

However, when asked 'what do you value, if anything about the oceans on Canada's coasts,' the response rates were very low as compared to the 'ocean-engaged' sample. Findings for both data sets, however, were relatively similar across age groups, gender, geographical regions, and proximity to the coast.

# WHAT OCEAN THREATS ARE CANADIANS MOST CONCERNED ABOUT?

OCEAN-ENGAGED ● GENERAL PUBLIC



**OCEAN WARMING**  
(CLIMATE CHANGE/ACIDIFICATION/RISING WATER LEVEL/STORMS<sup>5</sup>)

77.4% 9.5%



**OCEAN POLLUTION**  
(SEWAGE, GARBAGE, PLASTIC<sup>6</sup>)

60.5% 44.1%



**OVERFISHING**

45.3% 13.9%

Although 44.1% of the general public sample identified ocean pollution as an ocean threat of concern, climate change with linkages to the ocean (i.e., ocean warming, ocean acidification, rising water levels, storms) ranked extremely low as compared to the 'ocean engaged' sample. Efforts to better communicate the intersectionality of climate change and ocean and community health are needed.

<sup>5</sup> In COLSurvey, these items appeared as three separate response options: ocean warming; ocean acidification; and coastal hazards (e.g., sea level rise; storms). In the Nanos poll, these items appeared as one response option: climate changes/rising water level. The percentages shown represent a combined total of the options.

<sup>6</sup> In the Nanos poll, these items appeared as two separate response options: ocean pollution from sewage, garbage; and plastic.

# OCEAN ACTION

## 77.4%

of 'ocean-engaged' respondents identified "engaging in ocean action(s)" as 'very important,' ranking higher than 'cultivating ocean values' at 72.6% and 'mobilizing ocean knowledge' at 70.6%.



## IN EXAMINING "OCEAN ACTION" FURTHER, WE LEARNED



### 1 TO SUPPORT OCEAN HEALTH, CANADIANS THINK WE NEED TO COLLECTIVELY

- Reduce ocean pollution/ban plastic usage **62.1%, 24.9%**
- Reduce carbon emissions/footprint and plan for climate change **44.6%, 6.8%**
- Fine polluters/stricter regulations/stronger government involvement **N/A, 16%**
- Support just transition to sustainable economies **41.8%, N/A**
- Increase public awareness and education **41.3%, 3.6%**
- Create marine protected areas **41.2%, 0.8%**
- Fund research **23.1%, 2.0%**
- Promote Indigenous Knowledge and Rights **20.9%, N/A**
- Support resource management/sustainable use of resources **19.4%, 7.2%**



### 2 TO SUPPORT OCEAN HEALTH, CANADIANS THINK WE NEED TO INDIVIDUALLY

- Reduce personal waste/cut back on using plastic **60.5%, 32.5%**
- Raise awareness and teach others **54.3%, 2.5%**
- Change buying habits **53.7%, 7.2%**
- Take political action **45.4%, 7.4%**
- Reduce carbon emissions/footprint **44.7%, 2.7%**
- Pay taxes/carbon tax **N/A, 6.2%**
- Donate/support initiatives **N/A; 5.3%**
- Everything I can/I already do a lot **N/A, 4.1%**
- Participate in shoreline clean-ups **19.9%, 3.2%**
- Engage in citizen science projects **16.1%, N/A**
- Nothing/it should be government's responsibility **0.5%, 5.3%**
- Live too far away/don't feel like I can do anything **N/A, 3.1%**

### 3 TO MOST EFFECTIVELY PROTECT THE OCEAN, CANADIANS LOOK TO

- Federal Government **67.8%\***
- Provincial/Territorial Governments **44.7%**
- Environmental & Conservation Organizations **38.6%**
- Industry **31.7%**
- First Nations, Métis, Inuit governments, organizations and communities **25.3%**
- International governing bodies **22.6%**
- Coastal communities **20.9%**
- Individuals **19.2%**
- Local governments **17.3%**
- Researchers **15.3%**
- Other **2.1%**
- None of the above **0.2%**

\*COLSurvey data only

OCEAN-ENGAGED ● GENERAL PUBLIC

## METHODS AND FUTURE USE OF COLSURVEY

AN EMERGING TOOL TO MEASURE DIMENSIONS OF OCEAN LITERACY BEYOND OCEAN KNOWLEDGE

Two factors (ocean perceptions and ocean values) incorporated into the COLSurvey were developed from previously referenced inventories and data that emerged from a series of focus groups with collaborators and the COLC research team. To evaluate the questionnaires each statement was responded to on a five point Likert scale (ranging from strongly agree to strongly disagree), and validity and reliability data were calculated for each factor independently for both samples. The calculated values for the Cronbach alpha and discriminant validity from administration of COLSurvey to both groups indicated that ocean values and ocean perceptions are considered valid factors for the COLSurvey. This demonstrates that the COLSurvey instrument is robust and can be used in a variety of contexts (for educators and/or the general public) for future studies wishing to measure or describe these important factors (or dimensions) of ocean literacy.

To learn more, contact Diz Glithero at [diz@colcoalition.ca](mailto:diz@colcoalition.ca) and David Zandvliet at [david\\_zandvliet@sfu.ca](mailto:david_zandvliet@sfu.ca)

## WHAT WE LEARNED

Canadians identify as an ocean nation, learn most about the ocean through media, are willing to make lifestyle changes to support ocean health, and want Canada to be an international leader in ocean protection. Canadians are split on what actions to take, what we value about the ocean, and the extent to which the ocean influences our day-to-day lives.

Ocean perceptions and values are remarkably similar across age groups, gender, geographical regions, and proximity to the coast, as well as frequency of visits to the ocean.

## OTHER RECENT OCEAN SURVEYS & POLLS IN CANADA

ATLANTIC CANADA PUBLIC OPINION STUDY  
JANUARY 2020

Led by Oceans North with partners in Atlantic Canada

PUBLIC OPINION ON MARINE PROTECTED AREAS  
APRIL 2019

Led by Sea Blue Canada and Environics Research

OCEANS AND OCEAN PROTECTION  
MAY 2019

Led by Avalanche and funded by Canadian Environmental Grants Network