



**CANADIAN
OCEAN
LITERACY
COALITION**

PUBLIC OCEAN PERCEPTIONS REPORT

DRAFT FOR STUDY LEADS' REVIEW
APRIL 14, 2023



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EXECUTIVE SUMMARY

The Public Perceptions Research (PPR) Study is a follow up initiative to the Canadian Ocean Literacy Coalition's (COLC) national survey, completed in 2019-2020. COLC's national survey measured people in Canada's varying relationships with the ocean and the ways ocean literacy is understood and practiced across different regions and sectors.

The PPR Study compared the results of the COLC national survey to other comparable ocean-focused surveys in order to develop a baseline understanding of public ocean perceptions in Canada and to highlight approaches, needs, and opportunities for future public ocean perception surveys.

By highlighting the key dimensions of ocean literacy and relevant themes, the study identifies ways that future surveys conducted by any member of the ocean sector can contribute new baseline or trend data to a shared body of public ocean perceptions knowledge. It also enables different organizations to coordinate their efforts or combine resources in the future.

Five studies were included in the landscape review. The organizations responsible for these studies gave permission to COLC to prepare this analysis, however the findings and results remain their sole property.

THE VALUE OF PUBLIC OCEAN PERCEPTIONS DATA

Public perceptions research is a crucial tool for marine conservation initiatives:

By understanding public perceptions of the sea, particularly the ways in which people value and connect with the marine environment and the issues which affect it, engagement can be developed to resonate with the target audience and generate the greatest marine conservation outcome!

By highlighting the key dimensions of ocean literacy and relevant themes, the study identifies ways that future surveys conducted by any member of the ocean sector can contribute new baseline or trend data to a shared body of public ocean perceptions knowledge. It also enables different organizations to coordinate their efforts or combine resources in the future.²

When conducted routinely and with consistent design, public ocean perceptions surveys can also identify shifts in perceptions over time. Insight into trends complements the snapshot insights provided by individual surveys. The need for trend insight is one of the motivations for this study.

^{1,2} Rebecca Jefferson, Emma McKinley, Stuart Capstick, Stephen Fletcher, Holly Griffin, Martina Milanese (2015). Understanding audiences: Making public perceptions research matter to marine conservation. *Ocean & Coastal Management*, Volume 115, Pages 61-70. Retrieved from <https://doi.org/10.1016/j.ocecoaman.2015.06.014>.



PURPOSE OF THE STUDY

The aims of the study were to:

1. Identify Canadian sources of recent public ocean perceptions data;
2. Create a baseline for public ocean perceptions; and,
3. Provide recommendations for approaches to future public ocean perceptions surveys that would enrich understanding of trends in ocean literacy in Canada.

Step One: Identifying Canadian Sources

To be included in the Public Perceptions Review landscape scan, studies needed to meet the following criteria:

- Be national (Canadian) in focus
- Have been conducted with results available between 2019 and 2022
- Have a marine focus
- Have a thematic emphasis on ocean values and attitudes

Studies could have been led or commissioned by any type of organization (e.g., NGO, government) using any methodology (e.g., telephone, online).

Five studies from different sources met these criteria:

- [Canadian Ocean Literacy Coalition \(COLC\):](#) Canadian Ocean Literacy Survey (2019-2020)
- [Environment Funders Canada \(formerly CEGN\):](#) Ocean listening survey (2019)
- [SeaBlue:](#) Public Opinion on Marine Protected Areas (2019)³
- [Fisheries and Oceans Canada \(DFO\):](#) Canadians' Awareness and Understanding of Canada's Blue Economy (2022)
- [Oceans and Ocean Protection Canadian Parks and Wilderness Society \(CPAWS\):](#) Canadians' opinions on conservation and protected areas (2022)

Step Two: Creating a Baseline

To track Public Ocean Perceptions and ocean literacy trends in particular, an organizing framework for ocean perceptions and ocean literacy data needed to be developed.

It was determined that two factors should be captured: one that reflects themes, substance, and the content of ocean perceptions; and, a second that reflects the type or dimensions of perception itself. The first gives researchers insight into what people are perceiving and the latter gives insight into how they are perceiving it. Thematic organization helps researchers differentiate between vastly different streams of information, such as general ocean awareness (e.g., "there is one interconnected global ocean") and the role the ocean plays in the Canadian economy. Dimensional organization helps researchers differentiate between types of perception, such as cognitive understanding and emotional understanding.

³ A new version of this study was released in January 2023, after the inclusion criteria had been defined and the landscape scan was underway. See Recommendations section for more.



Themes:

Nine **themes** were identified to reflect the focus or content of people’s ocean perceptions:

1. Ocean Protection

- Ocean protection awareness, priorities, strategies, and leadership

2. Governance

- Perceptions and understanding related to processes of enforcement and modification related to ocean and coastal activities, health and protection

3. Ocean Values

- Ocean values related to daily lives, resources, protection, economics, governance

4. Blue Economy

- Perceptions and understanding related to ocean-based economic activities, assets, growth, and services

5. Ocean Connection

- Reciprocal influences (actual or perceived) between humans and the ocean; Or references to the physical, emotional, spiritual relationship(s) with the ocean

6. Ocean Health

- Perceptions of ocean health, its importance to daily lives, ocean health priorities, and objectives

7. Knowledge/Awareness

- Understanding of the ocean and how information is sourced, taken up, and shared

8. Ocean Influences & Solutions

- Actions, influences, and innovation to support healthy oceans

9. Ocean Threats

- Awareness and concerns related to ocean threats (actual or perceived)

These themes were developed by the lead researcher based on the material in the survey questions and responses. The number of questions relevant to each of the nine themes is depicted in Table 1.

	DFO	COLC	CEGN	CPAWS	SEABLUE	TOTAL
Ocean Protection	2	6	8	18	9	43
Governance	9	2	1	23	2	37
Ocean Values	10	3	3	7	0	23
Blue Economy	10	2	0	5	2	19
Ocean Connection	6	8	2	0	0	16
Ocean Health	10	2	2	0	2	16
Ocean Knowledge, Awareness, Communication	11	3	0	0	2	16
Ocean Solutions	0	6	0	0	0	9

Table 1: Number of questions relating to each theme, by survey



Dimensions:

Five **dimensions** were identified that reflect different influences on ocean literacy levels:

1. Attitudes and Behaviours
2. Individual Behaviour & Activism OR Collective Action
3. Knowledge, Awareness, and Communication
4. Support, Trust & Transparency
5. Emotional/Personal Connections; Access, Experience, Proximity

These five dimensions were informed by recent research conducted by McKinley, Burdon, and Shellock⁴

Applicable themes and dimensions were assigned to each survey question. Multiple themes and dimensions could be assigned to each question, if relevant. The number of questions relevant to each of the five dimensions is depicted in Table 2. The combined results for Themes and Dimensions are depicted in Table 3.

	DFO	COLC	CEGN	CPAWS	SEABLUE	TOTAL
Attitudes and Behaviours	24	19	9	28	12	92
Individual Behaviour & Activism or Collective Action	26	15	7	22	9	79
Knowledge, Awareness, and Communication	25	8	3	11	16	63
Support, Trust & Transparency	9	2	6	16	3	36
Emotional/Personal Connections; Access, Experience, Proximity	6	5	4	0	0	15

Table 2: Number of questions relating to each Ocean Literacy Dimension, by survey

	Attitudes and Behaviours	Individual Behaviour & Activism or Collective Action	Knowledge, Awareness, and Communication	Support, Trust, and Transparency	Emotional/Personal Connections; Access, Experience, Proximity
Governance	32	32	2	17	0
Ocean Protection	28	24	15	18	2
Ocean Values	23	9	11	3	2
Blue Economy	15	15	7	10	0
Ocean Health	12	1	12	0	1
Ocean Connection	6	11	5	0	10
Ocean Solutions	4	6	1	0	0
Ocean Threats	3	0	3	0	0
Ocean Knowledge, Awareness, Communication	1	6	16	0	0

Table 3: Number of questions per theme in all surveys (highest to lowest), by Ocean Literacy Dimension

⁴ McKinley, E, Burdon, D. & R.J. Shellock (2023). The evolution of ocean literacy: A new framework for the United Nations Ocean Decade and beyond. *Marine Pollution Bulletin*, 183 (114467). Retrieved from: <https://www.sciencedirect.com/science/article/pii/S0025326X22011493?via=ihub>



Use of the landscape scan findings

These findings can be used in a variety of ways, including the following:

1. Public ocean perceptions researchers and analysts seeking existing data to help formulate follow-up questions or identify a baseline for comparison can easily identify relevant data by theme and/or dimension.
2. Researchers conducting new surveys can use this information to identify other organizations with overlapping interests that might be interested in collaborating on survey design or receiving survey results.
3. The frequency and volume of questions clustered around particular themes and topics provides a snapshot of the themes and dimensions that were considered important during the survey windows (2019–2022).
4. Important themes and dimensions for which there is little survey data may be highlighted in new surveys to deepen understanding of public perceptions in these areas.

Step Three: Recommendations and Next Steps

Recommendation #1: Collect more public perceptions data

The Canadian Ocean Literacy Coalition and other ocean sector organizations should continue to conduct routine public perceptions surveys to collect data relevant to ocean perceptions and ocean literacy. Surveys do not need to cover the entire range of ocean themes and ocean literacy dimensions, however specific questions can be added to fill gaps, update the baseline, or monitor trends.

Data could be collected in ocean-focused surveys led by one organization, a collaborative effort, or through the inclusion of a handful of questions in a large public perceptions study. Survey results could be shared with COLC and the dataset updated with the new information.

Over time, this data will be crucial in understanding whether ocean conservation and ocean literacy efforts are having an impact at the population level. It will also provide invaluable insight to help shape communications and education strategies that effectively connect with and engage the general public.





Recommendation #2: Collect data before/ after important ocean sector milestones

Ocean perceptions information will be particularly useful just before or just after key milestones, including these:

- [The UN Ocean Decade, 2021—2030](#). Perceptions data from the beginning of the Decade forms a baseline. Data collected mid-way through the Decade (2024, 2027) will allow ocean sector organizations to update their communications, education, and public engagement strategies to remain relevant and effective. Data from the end of the Decade will indicate if and how public perceptions shifted over the course of the Decade.
- [The Canadian Ocean Literacy Strategy](#) was launched in March 2021; 2022 marked the first full year of implementation. The Strategy is due to be reviewed and updated in 2024; public perceptions data would provide useful insight for this process.
- [COP15 and IMPAC5](#) were just two of several major national and international ocean policy milestones occurring in Canada in 2022 and early 2023. At the same time, forces such as COVID-19 and economic changes have influenced public priorities and attention since three of the five studies in the scan were completed. In light of these events, public ocean perceptions may have shifted recently.

For these reasons, an updated survey in 2023 or early 2024 would be very timely.

Recommendation #3: Conduct a content analysis of the landscape scan data

A content analysis of the survey responses in the landscape review could create a public perceptions baseline against which future survey responses could be compared.

For example, the COLC survey asked people whether they agreed or disagreed with the statement that “Canada is an ocean nation” and 84% of respondents agreed and 5% disagreed. DFO asked the same question and 76% agreed, with 10% disagreeing. Similarly, COLC asked if Canada has an effective strategy to protect the ocean and 55% of respondents disagreed.

DFO asked a similar question, and 60% of respondents said that Canada is doing a fair or poor job of protecting the ocean. The content analysis would summarize the questions and the range of responses for future comparisons.

The content analysis could also include recommendations for standardized question language to improve comparability in the future (for example, some questions include a “neutral” option and some do not).



Recommendation #4: Collect more data to explore themes and dimensions

The themes and dimensions provide a helpful framework for designing future survey questions and analyzing survey results.

Based on the landscape review, these are a few of the areas that are worthy of further exploration:

- **Ocean Connections:** “Connection” encompasses both physical connection/ access to the ocean and emotional connection. Questions about connections are useful in surveys because they can also help to interpret responses to other questions: for example, correlations between strong feelings of connection and support for ocean conservation.
- **Ocean Protection:** The perceived efficacy of Canada’s Oceans Protection Plan will be relevant and may change rapidly. These perceptions can include beliefs that enough is being done and/or that the work is being done by the right people, organizations, and/or sectors.
- **Ocean Health & Threats** questions could explore specific indicators and/or threats to see if those indicators are changing and/or whether perceptions of importance and urgency are increasing or decreasing.
- **Ocean Knowledge** encompasses (i) actual knowledge of the ocean; (ii) the public’s feeling of satisfaction with their level of knowledge/access to knowledge; and, (iii) people’s sources of ocean knowledge. Ocean Knowledge survey questions can be cross-referenced against survey participant information (e.g., region and demographics) to assess differences between ocean knowledge in different communities. This type of analysis could provide insight into equity and inclusion in ocean sector and ocean literacy efforts.
- **Solutions:** There is space for more survey questions that provide insight into which solutions people find inspiring and what they perceive as barriers to action.
- **Governance, Solutions, and Trust:** There is space for more understanding of public perceptions as they relate to both individual solutions and collective action and to track whether these perceptions are changing. Similarly, survey questions that help to identify who is trusted to develop and implement solutions and why those people/ organizations are trusted are helpful.
- In this latter case, ocean perceptions survey results could be compared to general survey results to establish whether ocean perceptions are different from perceptions about other mainstream issues. (Specifically, the annual Edelman Trust Barometer questions of trust in solutions and governance and routine public opinion surveys that describe where Canadians get their news.) If there are no significant differences, then such surveys could be used to augment ocean perceptions research.



Recommendation #5: Add the SeaBlue Canada and Environics Research Public Opinion Survey to the landscape review

In January 2023, SeaBlue Canada published a new Marine Protected Areas Public Opinion Survey based on data collected in November 2022. The survey results could be incorporated into the landscape review.

Recommendation #6: Reconvene the study leads

A collective meeting and/or series of one-on-one discussions with the study leads and other organizations interested in PPR would be beneficial to wrap this project. The group could provide their reactions to the research summary, add to the recommendations, and provide additional thoughts on the potential collective benefits for PPR in the future.

RELATED DOCUMENTS

Below, please find hyperlinks to related materials that are publicly available, and contact details for related materials available upon request:

- Fisheries and Oceans Canada (DFO): [Canadians' Awareness and Understanding of Canada's Blue Economy \(2022\)](#)
- Environment Funders Canada (EFC, formerly CEGN): Oceans & Ocean Protection (2019); Contact for study access: [Thea Silver](#), Managing Director
- Canadian Ocean Literacy Coalition (COLC): [National Survey \(2019-2020\) \(EN\) \(FR\)](#)
- SeaBlue: [Public Opinion on Marine Protected Areas \(2019\)](#); NOTE: SeaBlue has since published a [newer Public Opinion Survey \(Dec 2022\)](#) after our analysis was complete
- Canadian Parks and Wilderness Society (CPAWS): [Canadians' opinions on conservation and protected areas \(2022\)](#)
- For raw data specific to COLC's National Study or the PPR Study as a whole, please contact jen@colcoalition.ca with "PPR Raw Data request" in subject line.

RESEARCH TEAM CONTACTS

- For PPR Study methodology and analysis questions, email Jen McRuer: jen@colcoalition.ca.
- For questions about this PPR Report, email Krystyn Tully: krystyn@entremission.com.
- For questions about COLC's current ocean literacy research projects and collaboration opportunities, email Diz Glithero: diz@colcoalition.ca.