

Survey of British Columbia coastal residents and their values of Ocean resources

Methodological Report

Prepared for Fisheries and Oceans Canada (DFO)

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This public opinion research report presents the methodology for a hybrid online-telephone survey conducted by EKOS Research Associates Inc. on behalf of Fisheries and Oceans Canada (DFO).

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Cette publication est aussi disponible en français sous le titre Enquête auprès des résidents côtiers de la Colombie-Britannique et de leurs valeurs des ressources océaniques.

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SUMMARY

A. CAMPAIGN BACKGROUND

Fisheries and Oceans Canada (DFO) helps to ensure healthy and sustainable aquatic ecosystems through habitat protection and sound science. DFO uses Marine Protected Areas (MPAs) as a regulatory tool to achieve long term conservation, to protect habitats, species, ecological integrity, biodiversity, and productivity of the oceans. MPA networks are a collection of individual MPAs that work together to achieve broader conservation goals. Oceans Act Marine Protected Areas, Indigenous Protected and Conserved Areas (IPCAs), National Marine Conservation Areas and marine National Wildlife Areas, are examples of MPA, along with area-based conservation measures and provincial and/or territorial protected areas.

DFO has an established goal of protecting 30 per cent of Canada's oceans by 2030. DFO works with First Nations, provincial partners, and stakeholders across marine spaces to achieve ecological, economic, cultural and social objectives. The effect of MPAs on ecological, economic, social, and cultural values is critical in the design, establishment, and management of MPAs, along with the achievement of marine conservation goals.

DFO is required to consider economic implications of regulatory changes to designate marine protected areas. This requirement is accomplished through socio-economic analysis and cost-benefit analysis. However, there are multiple values and interests among stakeholders, rightsholders and the general public that are not well captured by economic methods (e.g., Indigenous cultural values, recreational fishing values).

DFO seeks to understand the values and interests among stakeholders, rightsholders and the general public within the Pacific Region. The objectives of the baseline survey on the social and cultural values of the ocean with costal residents in BC are:

- To identify the diverse values of the ocean of coastal residents in British Columbia
- To build a profile of coastal residents values of the ocean and associated benefits
- To examine BC coastal residents perceptions on MPAs and on potential effects of the implementation of MPAs.

Survey results will provide an understanding of the diverse values of the ocean to costal communities and allow for an assessment of the perceived outcomes, benefits, and impacts associated with the implementation of MPA Networks in BC.

B. METHODOLOGY

A bilingual, national hybrid survey was conducted online and by telephone with 1,601 resident of British Columbia's 15 coastal districts who are 18 years of age or older. The questionnaire was provided by DFO in English and in French. The survey was collected between March 27 and April 28, 2024. The interview took an average of 12 minutes to be complete online and 19 minutes by telephone. Topics included:

- participation in economic and leisure activities related to the ocean;
- importance of and dependence on the ocean along a number of dimensions including community reliance on ocean sectors, activities and facilities;
- concerns related to the impacts of pollution and climate change on the ocean;
- effectiveness of marine protected areas in mitigating these impacts; and,
- sources used for information about ocean and coastal regulations/ management.

A portion of the sample was drawn from our in-house Probit panel, which is assembled using a random digit dial process for sampling from a blended land-line cellphone/frame and provides full coverage of Canadians with telephone access. The distribution of the recruitment process is meant to mirror the actual population in Canada (as defined by Statistics Canada). As such, our more than 130,000-member panel can be considered representative of the general public in Canada (meaning that the incidence of a given target population within our panel very closely resembles the public at large) and margins of error can be applied.

Because of the restrictive nature of the sample target (coastal British Columbia), a sizable portion of the sample was collected using a random digit dialling (RDD) sample source, using a blend of landline and cell phone sample. The response rate was 13% online, and 4% by telephone. A weight was calculated using crosstabulation software to correct for response bias between the population distribution of the final sample and population estimates for coastal district and age based on the 2021 Census. The sample carries an associated margin of error of +/- 2.5 percent at a 95 per cent confidence level for questions posed to the complete sample. Survey results can be extrapolated to the population of coastal residence in British Columbia.

Appendix A provides the details of the methodology for the survey. The questionnaire can be found in Appendix B.

C. CONTRACT VALUE

The value of the contract is \$80,436.95 including HST.

D. POLITICAL NEUTRALITY CERTIFICATION

I hereby certify as Senior Officer of EKOS Research Associates Inc. that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Policy on Communications and Federal Identity and the Directive on the Management of Communications. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

Signed by:

Susan Galley (Vice President)

APPENDICES

A. DETAILED METHODOLOGY

Questionnaire and Pretest

The survey questions were provided in English and in French by the DFO Project Authority and reviewed by EKOS Research for clarity and flow, and subsequently programmed. The average time it took respondents to complete the survey was 12 minutes online and 19 minutes by telephone. Prior to its launch, the baseline survey was pre-tested between March 7th and 9th with 38 respondents (19 by telephone and 19 online). A pretest was conducted to ensure there were no issues with the programming logic, to verify if the flow of questions made sense, to check if any questions, terms, or response categories were not clear to respondents, and to ensure there were no technical issues. Since no changes were made, these cases were retained in the final sample.

Online and Telephone administration

In order to introduce survey participants to the purpose of the project, the questionnaire was prefaced with a brief introduction to the study and rationale for the research. Respondents were told the purpose of the survey and how the information would be assisting the Government of Canada. The voluntary and confidential nature of the survey was also emphasized. Instructions for completing the survey clearly indicated how to move through the questionnaire and fill in responses. Email invitations included both an email address and a 1-800 number that respondents could use in the event they had questions about the study or completing the questionnaire. The survey was administered online and by telephone using a bilingual questionnaire. All work was carried out according to the specifications outlined in the Government of Canada standards.

For the online administration, the bilingual survey questionnaires were installed on a secure webserver controlled by EKOS. The email invitation included a description and purpose of the survey (in both languages) along with a link to the survey website. When respondents clicked the survey link, they were taken to a website containing the survey instrument. Once inside the survey, the respondent had the choice of completing the questionnaire in French or English (with the option of changing the survey language at any time). The survey database was mounted using a Personalized Identification Number (PIN), so only individuals with a PIN were allowed access to

the survey. The PIN also allowed respondents to exit and re-enter the survey at any time to complete or change information before the questionnaire was completed/ submitted.

Telephone interviews were completed using computer assisted telephone interviewing software (CATI) allowing interviewers to input responses from respondents as the survey unfolded. During initial training, telephone interviewers were given instruction about the study objectives and sampling — as well as the meaning and intent of specific items in the survey. Practice interviews also took place. Interviewers input survey responses by selecting a category offered on the screen that best reflected the respondent's answer. For open-ended questions, however, verbatim responses from the respondent were inputted for later review and coding.

Telephone interviews were carried out under regular supervision and 10 percent of interviews were monitored to ensure professional conduct and data quality. A minimum of six call-backs (seven total calls) were made to each selected household in the original sample before retiring a case and substituting another household. Follow-up calls were made on subsequent days, at varying time periods to maximize the potential for reaching a given respondent, and callback appointments were taken at the convenience of the respondent. All individuals were also asked at the start whether they preferred to conduct the interview in English or French.

Survey data collection adhered to the <u>Standards for the Conduct of Government of Canada Public Opinion Research—Online Surveys</u>, as well as all applicable industry standards. EKOS informed respondents of their rights under the *Privacy Act* and the *Access to Information Act* and ensured that those rights were protected throughout the research process. This included: informing respondents of the purpose of the research; identifying both the sponsoring department and the research supplier; informing respondents that their participation in the study is voluntary, and that the information provided would be administered according to the requirements of the *Privacy Act*.

Sample

The original plan for the survey sample was to collect 2,000 cases based on the population in each of the 15 coastal districts, adjusting the sample to maximize cases completed in each coastal district. To the extent possible, the final sample was to include a sufficient number of cases in each district to be able to isolate results with confidence (e.g., plus or minus 9.8%, 19 times out of 20). The margin of error was expected to be widest in the Central Coast, and Mount Waddington districts. Close to half of the overall sample was expected to be collected among residents of the Greater Vancouver or Capital districts.

Some survey respondents were randomly selected from EKOS' Probit panel, as described below. The survey sample included only records with the postal codes found across the 15 coastal districts of British Columbia. EKOS' Probit panel is assembled using a random digit dial process for sampling from a blended land-line cell-phone frame and provides full coverage of Canadians with telephone access. The distribution of the recruitment process is meant to mirror the actual population in Canada (as defined by Statistics Canada). As such, our more than 130,000-member panel can be considered representative of the general public in Canada (meaning that the incidence of a given target population within our panel very closely resembles the public at large) and margins of error can be applied. All households/individuals in the Probit panel are contacted by telephone and the nature of the panel is explained in greater detail (as are EKOS' privacy policies) and demographic information is collected. At this time, the online/off-line as well as landline/cell phone status is ascertained to determine the method of completing surveys (i.e., online, telephone, or mail). This variable of 'type of telephone service' (cell phone only, landline only or both) collected at the time of screening is used to determine cell phone only sample. As with any random digit dialling sample, Probit panel cases are considered to be a probability-based sample.

Outside of the Greater Vancouver and Capital districts, additional sample was also drawn using a random-digit dialling (RDD) approach among landlines. The overall split was roughly 50% landlines and 50% cellphone sample.

Outcome

A total of 1,601 cases were completed. An analysis of the age distribution obtained from the RDD sample, as well in later samples drawn from the panel (i.e., of the remaining available panel records not already sampled) found that concentrations of those 65 or older were increasing. It was therefore decided to close data collection before the 2,000-case target had been met. Fieldwork was conducted between March 26 and April 28, 2024. The associated margin of error for the sample of 1,601 is up to plus or minus 2.5%, at a .95 confidence interval (i.e., 19 times out of 20) in each sample. The number of cases collected in each of the 15 coastal districts is as follows:

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Table 1: Distribution of Sample by Coastal District and Completion Mode

Coastal District	Online	Telephone	Total
Alberni-Clayoquot	10	47	57
Capital	195	74	269
Central Coast	1	20	21
Comox Valley	30	46	76
Cowichan Valley	36	73	109
Fraser Valley	17	10	27
Greater Vancouver	404	147	551
Kitimat-Stikine	17	34	51
Mount-Waddington	4	35	39
Nanaimo	52	62	114
Powell River/Qathet	11	46	57
North Coast-Skeena Queen Charlotte	6	32	38
Squamish-Lillooet	8	22	30
Strathcona	25	59	84
Sunshine Coast	22	56	78
Total	838	763	1,601

Database Management

Cleaning

Once the survey data was collected, the database was reviewed for data quality and coding of open-ended questions was completed. Records were reviewed for branching logic and erroneous responses from respondents going back and forth in questionnaire. Two questions (Q1_3 - participation in economic and recreational activities related to the ocean and Q6_1 (main information sources) offered respondents an "other (specify)" in which to add a different response. Any verbatim comments provided were reviewed in order to re-classify these responses into an already listed response category. There was no new central theme represented among these verbatim comments. The relative few remaining comments left in other have no central theme, nor do they readily fit into one of the existing options. These are contained to only 3% of responses in Q1_3 and 5% in Q6.

Non-response bias and weighting

Because of the stratified sampling approach used there is a significant difference in concentration of the sample relative to the population in each of the 15 coastal districts based on Statistics Canada 2021 census data ¹ for British Columbia coastal residents. Specifically, there is an underrepresentation of residents in Greater Vancouver and the Fraser Valley, and overrepresentation of residents in each of the other 13 districts relative to the population. Given the number of districts represented by relatively few respondents in the sample, the weight target was based on clusters of districts to reduce the incidence of high weights on small sample segments. Seven district clusters were used (3 on Vancouver Island and 4 on Mainland BC):

- 1 Capital
- 2 Nanaimo
- 3 Alberni-Clayoquot, Comox Valley & Cowichan Valley
- 4 Greater Vancouver
- 5 Fraser Valley
- 6 Squamish Lillooet, Sunshine Coast, Strathcona and Powell River Qathet
- 7 Mount Waddington, Central and North Coast, Kitimat-Stikine

Therefore, the weight needed to incorporate population concentration by coastal district.

A comparison of the sample relative to the population across the 15 costal districts also showed a significant difference in concentration by age cohort because of the variability in participation rates by age. Specifically, there is an underrepresentation of those under 35, and to a lesser degree those 35 to 44, and an overrepresentation of those 65 or older. Our weight target corrects for age in the segments where there are considerable departures from the population. Since the sample concentration is similar to the population in the 45-54 and 55 to 64 age segments, these age cohorts were combined in the weight.

There is also a slight difference based on gender. Men are overrepresented slightly, and women are underrepresented slightly in the sample. Although gender could have been added to the weight target, there were already a number of weight target cells (districts crossed by age) and a review of topline results using two separate weights; one including gender and one excluding gender showed minimal differences between the two sets of results (i.e., the limited correction added to address the slight over or under representation does not contribute very much to the outcome of the results). There were no substantial differences between the population and sample in terms of household income

Based on 2021 census data from Statistics Canada (https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E)

A Random Iterative Method (RIM) weight was calculated using crosstabulation software to correct for response bias between the population distribution of the final sample and population estimates. To calculate a RIM weight, crosstabulation software reconciles the differences between the sample and the target distributions across a user-defined set of, typically demographic, variables through a series of random iterations, until it arrives at a weighting factor for each record that adjusts the population distribution of the data file to most closely match the target population.

The following table compares the population and sample distributions on key demographic characteristics.

Table 2: Comparison of Population and Sample Characteristics

Unweighted and Weighted Sample by Region	Population	Sample
Region		
Alberni-Clayoquot	0.8%	4%
Capital	11%	17%
Central Coast	0.1%	1%
Comox Valley	2%	5%
Cowichan Valley	2%	7%
Fraser Valley	8%	2%
Greater Vancouver	67%	34%
Kitimat-Stikine	0.9%	3%
Mount-Waddington	0.3%	.2%
Nanaimo	4%	7%
Powell River/Qathet	0.6%	4%
North Coast-Skeena Queen Charlotte	0.4%	2%
Squamish-Lillooet	1%	2%
Strathcona	1%	5%
Sunshine Coast	0.8%	5%
Age		
Under 35	27%	5%
35 – 44	17%	11%
45-54	16%	15%
55- 64	17%	18%
65+	24%	51%

Unweighted and Weighted Sample by Region	Population	Sample
Gender		
Male	46%	48%
Female	54%	49%
Gender Diverse		2%
Household Income		
Under \$20,000	.5%	.5%
\$20,000 to under \$40,000	14%	14%
\$40,000 to under \$60,000	14%	14%
\$60,000 to under \$80,000	13%	15%
\$80,000 to under \$100,000	11%	14%
\$100,000 to under \$150,000	20%	19%
\$150,000 and above	22%	19%

Response Rates and Non-Response Bias

The overall response rate for the survey is 5.7%, using the formula recommended by the Government of Canada: Response Rate = R/(U + IS + R). Online a total of 7,329 email invitations were sent, of which 56 were returned as undeliverable. 836 were completed and 106 were ineligible for a response rate of 13%. By telephone, 45,780 telephone numbers were attempted, of which 18,594 were not live lines. 763 were completed and 349 were found to be ineligible for a response rate of 4.1%. The response rate across the combined sample accessed, minus invalid cases, considering completed and ineligible cases is 5.7%.

Table 3: Response Rates – Online and Telephone

	Online	Telephone	Total
Total Sampled	7,329	45,780	53,109
Invalid	56	18,594	18,650
Unresolved (U)	6,132	20,691	26,823
In-scope non-responding	197	5,383	5,854
(IS)			
Ineligible (R)	106	349	355
Complete (R)	838	763	1,601
Response Rate (R/(U+IS+R)	13.0%	4.1%	5.7%

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Creation of Calculated Variables and Data Tables

The following steps were taken to create new variables and those needed to create banner tables.

- Q1 3 and Q1 3 were merged into a single variable.
- One harmonized coastal district code was created from a blend of respondent supplied postal codes and QREG.
- Responses for question QYEARS (# of years you have been a BC coastal resident) were categorized into six ranges by decade starting with under 20 years, ending with 60 or more. There is naturally a strong relation with age of respondent.
- Most responses in the questionnaire are a scaled response based on a 5-point extent scale (1=not at all and 5=a great extent/completely/very). These are shown individually in data tables, but responses 1 and 2 are also collapsed into "low", and responses 4 and 5 are collapsed into "high" while the midpoint remains on its own.
- Two new variables will be created:
 - o For responses to Q1_3 grouping respondents who participate in 1-economic activities (and possibly leisure activities) related to the ocean; 2-leisure activities only (but not economic activities) related to the ocean; and 3-are not involved in either.
 - o Responses to Q4A through Q4D capturing frequency of going to the ocean across the four seasons. Three groups will be categorized: 1-Those who go to the ocean daily or weekly in the winter (high frequency); 2-Those who go to the ocean monthly or less often in the summer (low frequency); 3-Everyone who does not fit into group 1 or 2 (medium frequency).

Data tables were created to isolate results for major subgroups to support basic analysis of the data (e.g., results for each age segment, gender, household income and minority status segment, as well as coastal region, combining several of the smallest districts for 12 districts). Other subgroups reflect relationships with the ocean including participation in economic or social activities, frequency of visiting the ocean and information sources used using the newly created variables as described above.

Statistical Testing

The weight is applied in all statistical testing in the data tables. Segments are tested against the pool of other segments shown in the specific table. Statistical testing uses is Chi². In the case of QYEARS, as well as all questions with scaled responses, a Student-t test is also used. Adjusted standardized residuals are used to identify cell counts that are statistically significant, noted with ++ (significantly higher) and -- (significantly lower) at the level of .05 or higher. The number of

symbols correspond to the level of significance (i.e., 1 symbol indicates significance at the .1 level, 2 indicates significance at the .05 level, 3 at the .01 level, and 4 at the .005 level).

For all questions with scaled response categories (extent scales), Chi² statistical testing is only performed on the combined categories and not the original responses (e.g., no testing performed on "not at all" and "not very much" individually). There is also no statistical testing performed for "Don't know"/ "Prefer not to say" response options.

B. Survey Questionnaire

WINTRO

Thank you for taking the time to complete this survey about the different values of the ocean of coastal residents in BC. This information will be used as a reference point to better understand perceptions of how marine spaces can contribute to people's well-being and perceptions about marine protected areas.

Si vous préférez répondre au sondage en français, veuillez cliquer sur français.

Your participation is voluntary and your responses will be kept entirely confidential and anonymous. The survey takes about 15 minutes to complete. This survey is being directed by EKOS Research, and is being administered according to the requirements of the *Privacy Act*. To view our privacy policy, here.

This survey is registered with the Canadian Research Insights Council's (CRIC) Research Verification Service. Click here if you wish to verify its authenticity (project code 20240307-EK178)

•			
If you require any technical assistance, please contact online@ekos.com .			
Your decision on whether or not to participate will not affect any dealings you may have with the Government of Canada.			
PINTRO			
Good morning/afternoon/evening, Bonjour, <[PANEL]May I speak with?>			
My name is and I am calling from EKOS Research Associates, a public opinion research company. We are conducting a study on behalf of the Government of Canada about the different values of the ocean of coastal residents in BC.			
Would you prefer to be interviewed in English or French?/Préférez-vous répondre en français ou en anglais?			
Your participation is voluntary and your responses will be kept entirely confidential. Your decision on whether or not to participate will not affect any dealings you may have with the Government of Canada. It is being conducted by EKOS Research, and administered according to the requirements of the Privacy Act. The survey is registered with the Research Verification Service of the Canadian Research Insights Council (CRIC) (IF ASKED: Visit https://canadianresearchinsightscouncil.ca/rvs/home/?lang=en if you wish to verify its authenticity (project code 20240307-EK178)).			
The survey takes about 15 to 20 minutes to complete, may I begin?			
Continue 1 Prefer to complete it online 2			

9

Refuse (THANK & TERMINATE)

EMAIL

May we email you an invitation to complete the survey online?

INTERVIEWER: Confirm spelling of email address < [EMAIL is not empty] (The e-mail we have on file is: EMAIL, is this correct?) > .

Yes, confirm Email: 7
No/Refuse 99

EMAIL2

Thanks. You should expect an email from online@ekos.com in the next few minutes.

Return to INTRO, code ON 1

PRIV

This call may be recorded for quality control or training purposes.

QAGEY

In which of the following age groups do you belong?

Less than 18 years old	98
18 to 24 years	2
25 to 34 years	3
35 to 44 years	4
45 to 54 years	5
55 to 64 years	6
65 or older	7
Prefer not to answer	99

POSTCELL

Because this is a survey of BC coastal residents, we would like to place you in one of the 15 coastal districts. What is your postal code? (ENTIRE postal code, used for analysis purposes only, will not be distributed in any way)

Postal code	1
Prefer not to answer	99

QREG

In which BC regional district do you live?

<[[PHONE]](IF NEEDED, READ)>	
Alberni-Clayoquot	1
Capital	2
Central coast	3
Comox Valley	4
Cowichan Valley	5
Fraser Valley	6
Greater Vancouver	7
Kitimat-Stikine	8
Mount Waddington	9
Nanaimo	10
Powell River (qathet)	11

North Coast (Skeena Queen Charlotte)	12
Squamish Lillooet	13
Strathcona	14
Sunshine Coast	15
None of these	98
Prefer not to answer	99

QYEARS

For how many years have you been a BC coastal resident?

Number of years :	1
Prefer not to answer	9999

Q1_3 [1,14]

These first questions help us understand how to best describe your relationship with the ocean. Do you work in any of the following areas related to oceans?

<[[PHONE]](Interviewer: I will read the list and you can stop me if I come to an area you work in — select all that apply - Do you work in ...)[ELSE]Please select all that apply> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Marine recreation or marine tourism	1
The marine transportation sector	2
The ocean renewable energy sector	3
The ocean non-renewable energy sector	4
Marine research or marine education	5
The aquaculture sector	6
The coastal forestry sector	7
The recreational fishing sector	8
The commercial fishing sector	9
Marine/coastal management (e.g., planning, monitoring, compliance)	11
Other (Please describe):	77
No, none of these	98
Prefer not to answer	99

Q1_3A [1,6]

Do you participate in any of the following activities?

<[[PHONE]](Interviewer: I will read the list and you can stop me if I come to one that applies to you — select all that apply)[ELSE]Please select all that apply> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Participate in a Food, Social, and Ceremonial (FSC) fishery	10
Participate or volunteer in marine or ocean related stewardship activities	12
Participate in marine/coastal recreation activities (e.g., kayaking, surfing, boating	g,
walking by the beach, swimming in the ocean, spending time at the beach with f	amily
and friends)	13
Other (Please describe):	77
No, none of these	98
Prefer not to answer	99

PQ1_4

How often did you visit the ocean or coast during each season in the past 12 months?

<[[PHONE]](IF NEEDED, READ)> (the time spent here can be related to work, recreation, or any other activity) <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Q1_4A

Winter (Dec, Jan, Feb) Daily Weekly Monthly Less often Never Don't know / Prefer not to answer	1 2 3 4 5 99
Q1_4B	
Spring (March, April, May)	
Daily	1
Weekly	2
Monthly	3
Less often	4
Never Don't know / Prefer not to answer	5 99
boll t know / Freier not to answer	33
Q1_4C	
Summer (June, July, August)	
Daily	1
Weekly	2
Monthly	3
Less often	4
Never	5
Don't know / Prefer not to answer	99
Q1_4D	
Fall (Sep, Oct, Nov)	
Daily	1
Weekly	2
Monthly	3
Less often	4
Never	5
Don't know / Prefer not to answer	99

PQ2_1

To what extent is the ocean important to you for each of the following?

<[[PHONE]](Interviewer: Read before each one "To what extent is the ocean important to you for or because...")> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Q2_1A food and other products to sustain my life and that of my family/community Not at all 1 Not very much 2 3 Some what Quite a bit 4 A great extent 5 Don't know / Prefer not to answer 99 Q2 1B outdoor recreation opportunities Not at all 1 2 Not very much 3 Some what Quite a bit 4 A great extent 5 Don't know / Prefer not to answer 99 Q2 1C income and employment opportunities Not at all 1 Not very much 2 3 Some what Quite a bit 4 5 A great extent 99 Don't know / Prefer not to answer Q2 1D ocean-based transportation opportunities (to get to work, to connect communities) Not at all 1 2 Not very much Some what 3 Quite a bit 4 A great extent 5 Don't know / Prefer not to answer 99 Q2_1E the scenery, sights, smells or sounds Not at all 1 Not very much 2 3 Some what 4 Quite a bit A great extent 5

Q2_1Fit contributes to healthy marine habitats (e.g., supports climate regulation, biodiversity)

Don't know / Prefer not to answer

Not at all 1
Not very much 2

99

	_	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
03.46		
Q2_1G		
it provides a place to learn about, teach, or research the natural environments		
Not at all	1	
Not very much	2	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
03.411		
Q2_1H		
it is sacred, religious, or spiritually special to me		
Not at all	1	
Not very much	2	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
02.11		
Q2_1I		
it has natural and human history that matters to me		
Not at all	1	
Not very much	2	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
Q2_1J		
it allows me to pass down the knowledge, traditions, or way of life of r	my ancestors	
Not at all	1	
Not very much	2	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
Don't know / Freier not to answer	33	
Q2_1K		
the opportunities it provides for getting together with my friends and	family or is part of my family's trad	ditional
activities	, , , , , , , , , , , , , , , , , , , ,	
Not at all	1	
Not very much	2	
Some what	3	
Quite a bit	4	
A great extent	5	
Don't know / Prefer not to answer	99	
,		

PQ3_1

How much do you and your family depend on the ocean for the following?

<[[PHONE]](Interviewer: Read "how much do **you** depend on the ocean for...")> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

03	1/

Employment, livelihoods, family business Not at all Not very much Somewhat Quite a bit Completely Don't know / Prefer not to answer	1 2 3 4 5 99
Q3_1B Directly harvesting seafood (e.g., fishing or trapping) Not at all Not very much Somewhat Quite a bit Completely Don't know / Prefer not to answer	1 2 3 4 5 99
Q3_1C Seafood bought locally or at other retail stores Not at all Not very much Somewhat Quite a bit Completely Don't know / Prefer not to answer	1 2 3 4 5 99
Q3_1D Recreational purposes (e.g., kayaking, diving, swimming) Not at all Not very much Somewhat Quite a bit Completely Don't know / Prefer not to answer	1 2 3 4 5 99
Q3_1E Mental and physical health Not at all Not very much Somewhat Quite a bit Completely	1 2 3 4 5

Q3_1F

Social purposes (e.g., spending time with family and friend	ds, participating in community activities like I	beac
cleaning)		
Not at all	1	
Not very much	2	
Somewhat	3	
Quite a bit	4	
Completely	5	
Don't know / Prefer not to answer	99	

Q3_1G

Cultural purposes (e.g., sharing traditions, cultural foods, sense of place)	
Not at all	1
Not very much	2
Somewhat	3
Quite a bit	4
Completely	5
Don't know / Prefer not to answer	99

PQ3_2

How important do you think the following ocean sectors, activities, and related facilities are in supporting the **community you live in**?

<[[PHONE]](Interviewer: Before each one read "How important is (...) in supporting **your community**")> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Q3_2A

Commercial fishing	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99

Q3_2B

Business supplying services for commercial fishing	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99

Q3 2C

Q3_2C	
Aquaculture (The farming of aquatic organisms such as fish, she	ellfish and aquatic plants)
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2D	
Seafood processing	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2E	
Recreational fishing	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2F	
Business supplying services for recreational fishing (e.g., guides	and charters, tackle and bait)
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2G	
Business supplying services for marine recreational activities (e.	g kayaking diving swimming whale watching)
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2H	
Forestry along coastal areas	
Not at all important	1
Not very important	2
The very important	-

Somewhat important Important Very important Don't know / Prefer not to answer	3 4 5 99
Q3_2I Ocean transportation	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2J	
Directly harvesting seafood for Food, Social, and Ceremonial purposes	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5
Don't know / Prefer not to answer	99
Q3_2K	
Physical infrastructure (e.g., docks, marinas, harbours, boat ramps, etc.)	
Not at all important	1
Not very important	2
Somewhat important	3
Important	4
Very important	5

PQ4_1

What is your level of concern about the following?

<[[PHONE]](Interviewer: "Before each one read "How concerned are you about...")> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

99

Q4_1A

Raising oceans temperatures (e.g., heat or storms)	
Not at all concerned	1
Not very concerned	2
Somewhat concerned	3
Concerned	4
Very concerned	5
Don't know / Prefer not to answer	99

Don't know / Prefer not to answer

Q4_1B

Rising sea levels	
Not at all concerned	1
Not very concerned	2
Somewhat concerned	3
Concerned	4
Very concerned	5
Don't know / Prefer not to answer	99
Q4_1C	
Changes in amount, size, and/or location of fish	
Not at all concerned	1
Not very concerned	2

Q4_1D

Concerned

Very concerned

Somewhat concerned

Don't know / Prefer not to answer

Pollution in the oceans or along the coasts (e.g., plastics and ocean debris, land runoff, oil spills, ocean dumping)
Not at all concerned
1
Not very concerned
2
Somewhat concerned
3
Concerned
4
Very concerned
5
Don't know / Prefer not to answer
99

3

4

5

99

Q4_1E

Habitat degradations and species loss in the oceans

Not at all concerned

1

Not very concerned

2

Somewhat concerned

3

Concerned

4

Very concerned

5

Don't know / Prefer not to answer

99

Q4_1F

Invasive species (e.g., green crab) in the oceans

Not at all concerned

1

Not very concerned

2

Somewhat concerned

3

Concerned

4

Very concerned

5

Don't know / Prefer not to answer

99

Q5_1A

How informed do you feel about general ocean and coastal issues?

Not at all informed	1
Not very informed	2
Somewhat informed	3
Informed	4
Very informed	5
Don't know / Prefer not to answer	99

Q5_1B

How informed do you feel about marine protected areas?

Not at all informed	1
Not very informed	2
Somewhat informed	3
Informed	4
Very informed	5
Don't know / Prefer not to answer	99

PQ5 2

How supportive are you of:

<[[PHONE]](IF NEEDED, READ)> NOTE: A marine protected area is a clearly defined geographical space recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. In Canada, 'marine protected area' includes a broad range of protected area designations, such as National Marine Conservation Areas (NMCAs), provincial Marine Parks and Conservancies, and Indigenous Protected and Conserved Areas (IPCAs).

Q5_2A

Marine conservation efforts such as the creation of marine protected areas in	n general
Not at all supportive	1
Not very supportive	2
Somewhat supportive	3
Supportive	4
Very supportive	5
Don't know / Prefer not to answer	99

Q5_2B

The creation of marine protected areas in British Columbia specifically	
Not at all supportive	1
Not very supportive	2
Somewhat supportive	3
Supportive	4
Very supportive	5
Don't know / Prefer not to answer	99

PQ5_3

To what extent do you believe that marine protected areas in BC support each of the following:

<[[PHONE]](Interviewer: Before each one read "to what extent do marine protected areas support (...) in BC")> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Q5_3A

healthy marine ecosystems	
Not at all	1
Not very much	2
Some what	3
Quite a bit	4
A great extent	5
Don't know / Prefer not to answer	99

Q5_3C

opportunities to have food and other products to sustain my life and that of my fan	nily/communi
Not at all 1	•
Not very much 2	:
Some what 3	1
Quite a bit 4	
A great extent 5	i
Don't know / Prefer not to answer 99	1

Q5_3D

income and job opportunities for the tourism and recreation sector	
Not at all	1
Not very much	2
Some what	3
Quite a bit	4
A great extent	5
Don't know / Prefer not to answer	99

Q5_3E

income and job opportunities for the recreational fishing sector	
Not at all	1
Not very much	2
Some what	3
Quite a bit	4
A great extent	5
Don't know / Prefer not to answer	99
,	

Q5_3F

income and job opportunities for the commercial fishing sector	
Not at all	1
Not very much	2
Some what	3
Quite a bit	4
A great extent	5

99

Don't know / Prefer not to answer

Q5_3L

opportunities for future generations	
Not at all	1
Not very much	2
Some what	3
Quite a bit	4
A great extent	5
Don't know / Prefer not to answer	99

Q6_1 [1,3]

What are the main sources you use to get information about ocean and coastal regulations/management measures? (Select up to 3)

<[[PHONE]](Interviewer: Prompt for up to 3 responses)> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Colleagues	1	
Friends and family	2	
Newsletter received by email	3	
Communication from First Nations	4	
Official government websites (e.g., Fisheries and Oceans, Parks Canada, Environment		
Canada, BC Parks)	5	
Newspapers/Magazines	6	
TV/Radio (e.g., news/information programming)	7	
Social media	8	
Internet (e.g., Google search, other websites)	10	
My local community	9	
Other (Please specify):	77	
I do not look for information on this	98	
Prefer not to answer	99	

QGENDR

Our last few questions are to help group your responses.

What is your gender?

<[[PHONE]](IF NEEDED, READ)> This refers to the gender that you identify with which may be different from sex assigned at birth and may be different from what is indicated on legal documents.

Male	1
Female	2
Transgender	3
Non-binary Non-binary	4
Other (Please specify):	77
Prefer not to answer	99

QMINOR [1,3]

Do you consider yourself to be any of the following?

<[[PHONE]](Interviewer: Read list – select all that apply)[ELSE]Please select all that apply> <[[PHONE]](Interviewer: do not read text in parentheses unless clarification requested)>

Indigenous 1
Visible minority 2

Person with a mental illness or physical disability (long-term or recurring impairment such as vision, hearing, mobility, memory that limits daily activities) 3
I do not identify with any of the above options 98
Prefer not to answer 99

QINC

Which of the following options best describes your total household income last year, before taxes, from all sources for all household members?

Under \$20,000	1
\$20,000 to just under \$40,000	2
\$40,000 to just under \$60,000	3
\$60,000 to just under \$80,000	4
\$80,000 to just under \$100,000	5
\$100,000 to just under \$150,000	6
\$150,000 and above	7
Prefer not to answer	99

THNK

Thank you very much for taking the time to complete this survey.

THNK2

<[QAGEY = 98 or QREG = 98,99 or CALCREGDIS = 97,98,99]We appreciate your time, however, it seems that you are not eligible to participate in this particular survey.[ELSE]We will no longer contact you for the purposes of this study. Thank you for your cooperation.>