



Perceptions of the Irish public on priorities for the protection and sustainable use of the ocean

OCEAN CITIZEN SURVEY

PERCEPTIONS OF THE IRISH PUBLIC ON PRIORITIES FOR THE PROTECTION AND SUSTAINABLE USE OF THE OCEAN

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OUR VISION

The Marine Institute, as a global leader in ocean knowledge, empowering Ireland and its people to safeguard and harness our ocean wealth.

ACKNOWLEDGEMENTS

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CONTENTS

1.	ABOUT THIS REPORT	04
	1.1 What is the Mission for Healthy Ocean, Seas, Coastal and Inland Waters?	04
	1.2 Why did we do a survey?	04
2.	KEY FINDINGS	06
3.	WHAT DID WE ASK?	08
4.	WHO DID WE SURVEY?	08
5.	WHAT DID PEOPLE SAY?	12
	5.1 Exposure to the ocean	12
	5.2 Knowledge of the Ocean and Sources of Information	18
	5.3 Opinions on Marine Issues	22
	5.4 Concerns and Policy Priorities	28
6.	CONCLUSION	32

1. ABOUT THIS REPORT

1.1 What is the Mission for Healthy Ocean, Seas, Coastal and Inland Waters?

The European Union (EU) has a bold and ambitious aspiration to restore European marine and freshwater ecosystems by 2030, by reducing human pressures on marine and freshwater environments, restoring degraded ecosystems and sustainably harnessing the essential goods and services they provide. A group of top EU experts have put forward an ambitious proposal for a "Mission Starfish". This major flagship 'mission' for healthy ocean, seas, coastal and inland waters is to be funded by the EU under the forthcoming Horizon Europe Framework Programme (2021-2027) and will also need to be supported by other EU, national and regional funding programmes. To achieve its goal, the mission aims to raise awareness of the importance of healthy oceans, seas, coastal and inland waters among citizens and help develop solutions on a range of issues.

1.2 Why did we do a survey?

Citizens are crucial to the design and accomplishment of the mission in helping to set objectives and targets and ensuring that missions like this one make a real difference in everybody's lives. As part of the European Commission's engagement with citizens across multiple EU countries on the mission, the Marine Institute developed a survey to consult Irish citizens and seek their views on what they believe are the top priorities for the health of the ocean and inland waters and how we can sustainably use and benefit from marine and aquatic resources. The survey was based around two areas of the proposed mission, namely: filling the knowledge and emotional gap, and; decarbonising our ocean, seas and waters. The survey was launched online on 13 August 2020 and was open for four weeks.

This report presents the results of the survey summarising the opinions expressed by the 1013 respondents. The results provide an insight into people's opinions and levels of awareness of our ocean, seas, coastal and inland waters and will inform the mission planning.



2. KEY FINDINGS

POLLUTION IS THE PUBLIC'S BIGGEST CONCERN:

When asked which marine environmental issues they were most concerned about from a list of 15, 'pollution at the coast or in the sea' was the issue that was most frequently selected amongst the public's top three.

REDUCING MARINE PLASTIC POLLUTION IS THE BIGGEST POLICY PRIORITY:

Out of 14 climate change and marine policy issues, the policy area that was selected the most frequently by the respondents amongst their top three for prioritisation by the European Union was 'regulating the production, use and disposal of plastic to reduce marine plastic pollution'.

THE OCEAN IS BEING DAMAGED BY HUMAN ACTIONS:

The respondents strongly agreed (85%) that human actions are damaging the ocean.

MORE ACTION IS NEEDED TO IMPROVE THE HEALTH OF THE OCEAN:

Over 90% of survey respondents strongly agreed that more action needs to be taken to improve the health of the ocean.

MARINE ENVIRONMENTAL DATA COLLECTION IS IMPORTANT:

There was strong agreement (88%) that marine environmental data collection is important.

OCEAN HEALTH AND HUMAN HEALTH ARE CONNECTED:

There was strong agreement (approximately two thirds) that the health of the ocean and their own health is connected. The level of agreement rises to 92% when the respondents that 'more or less agree' are included.

THE OCEAN, SEAS AND INLAND WATERS HAVE THE POTENTIAL TO SUPPORT ECONOMIC GROWTH AND THE GENERATION OF NEW JOBS:

Approximately two thirds of the respondents strongly agreed that economic growth and job generation can be supported by the ocean, seas and inland waters.

SEABED MAPPING IS IMPORTANT TO SOCIETY:

While just under half of respondents (46%) consider that a high-resolution map of the ocean seabed is very important to society, the consideration of its importance rises to 81% when the respondents that consider it 'somewhat important' are also included.

THE ESTABLISHMENT OF A EUROPEAN OCEAN AGENCY IS A GOOD IDEA:

When asked whether they thought the establishment of a European Ocean Agency was a good idea, the majority of respondents (89%) answered yes.



3. WHAT DID WE ASK?

The survey questionnaire comprised four basic sections:

- Exposure, including recreational and occupational contact with the marine environment
- Sources of information and knowledge of the ocean, coastal and inland waters
- Opinions on marine issues
- Concerns and policy priorities



4. WHO DID WE SURVEY?

1,013 respondents

The survey was hosted online on 'decidim', a digital platform for citizen participation and promoted via social media and radio interviews organised by the Marine Institute.

This survey was open to the Irish public and had 1013 respondents in total. Fifty five percent of respondents were between the ages of 36 and 55, and over half of the respondents (58%) live within 5km of the

This is somewhat higher than comparable figures from the most recent Irish population census in 2016 which found that 40% of the total Irish population resided within 5km of the coast (Central Statistics Office, 2020¹).

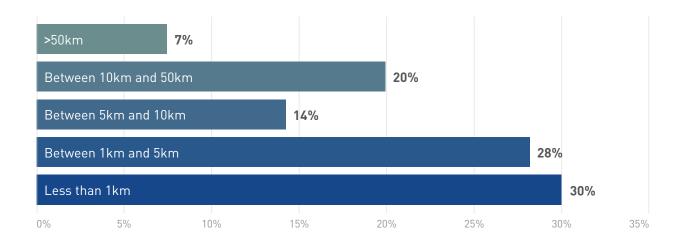
While the survey was promoted as much as possible to a wide audience across all demographic groups, it is possible that there is some bias in the type of respondents as the survey was actively communicated by Marine Institute employees through their own social and professional networks. The results presented should be viewed with this potential representative bias in mind.

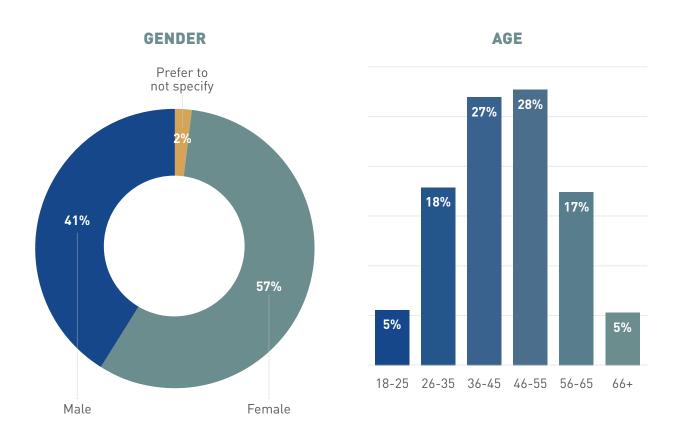
¹ Central Statistics Office (2020) Census of Population 2016 – Profile 2 Population Distribution and Movements. Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp2tc/cp2pdm/pd/



THE SURVEY RESPONDENTS

LIVING DISTANCE FROM THE COAST







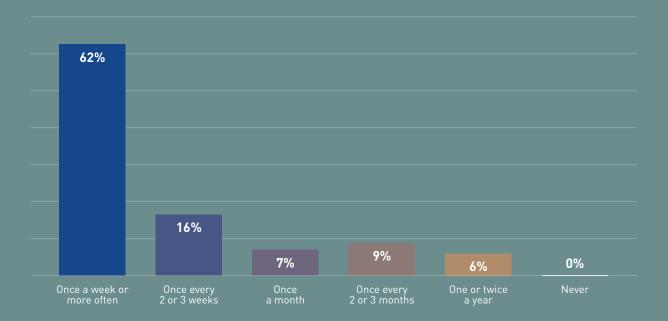
5. WHAT DID PEOPLE SAY?

5.1 Exposure to the ocean

These questions dealt with the public's exposure to the marine environment: how often they visited the coast, whether they or a member of their household worked in a marine sector and what recreational activities they have engaged in in the past 6 months when they visited the sea.

Q: Which of these statements best describes how often, if ever, you visit the coast or the sea?

VISITING FREQUENCY TO THE COAST OR SEA



When asked how often they visited the coast, approximately 62% of respondents stated that they did so once a week or more often.

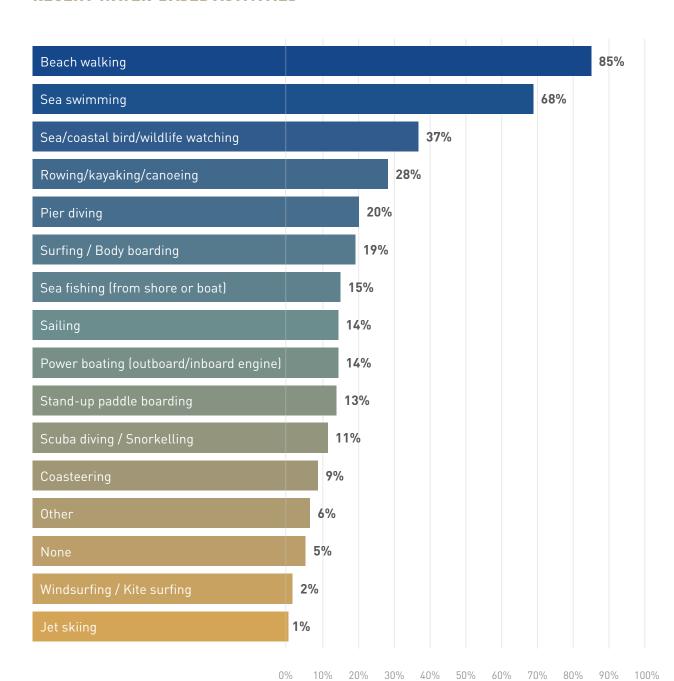
Many respondents also live close to the coast (30% within 1km and 58% within 5km), meaning coastal areas are very accessible to many of the respondents.

A previous survey across the EU found that countries where 50% or more of the respondents visited the coast only a few times per year were also the countries where people tended to live further from the coast (H2020 SOPHIE Consortium, 2020²).

² H2020 SOPHIE Consortium (2020) Citizens and the Sea. Public perceptions of Oceans and Human Health: A 14-country pan-European citizen survey. H2020 SOPHIE Project. Ostend, Belgium

Q: In the past 6 months, which, if any, of the following marine water-based activities have you engaged in?

RECENT WATER-BASED ACTIVITIES





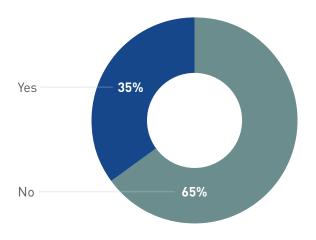
The three most common activities engaged in by respondents were beach walking (85%), swimming (68%) and sea/coastal bird/wildlife watching (37%). These activities do not require specialist equipment and are the most accessible to all age groups.

Overall, the results show that there has been a high level of engagement with the marine environment by respondents across a range of activities. In this case, 'the past 6 months' refers to the period covering mid-February through to the beginning of September 2020, which includes the summer season when marine activity would be expected to be at its highest.

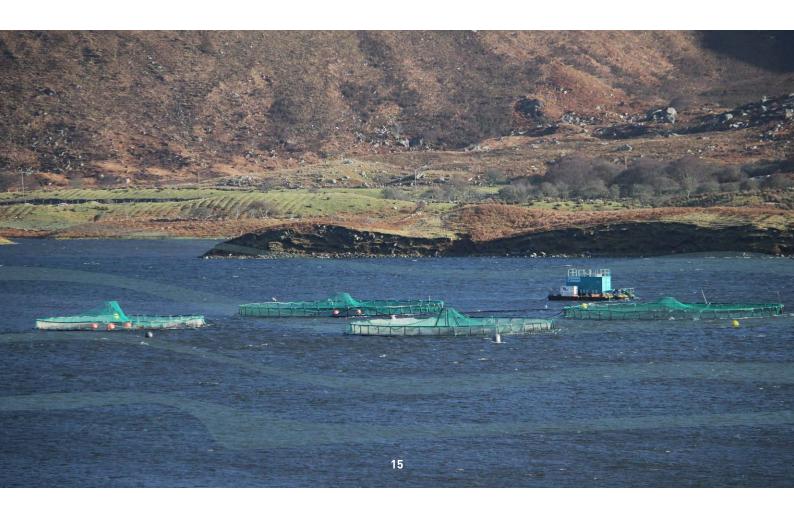
The year 2020 has been atypical due to the Covid-19 pandemic and the measures to limit virus transmission. These include a period of lockdown in Ireland from March to late July restricting movement to within 5km of home; the closure of non-essential businesses; the closure of schools in March; advice not to travel abroad and to limit social contacts. This may have influenced people's behaviour and led to increased engagement in marine activities in some instances (for example as a result of 'staycationing') or decreased engagement in marine activities in other instances (for example due to the cancellation of activities).

Q: Please indicate whether you or any member of your household works in any of the following professions/industries associated with the marine environment.

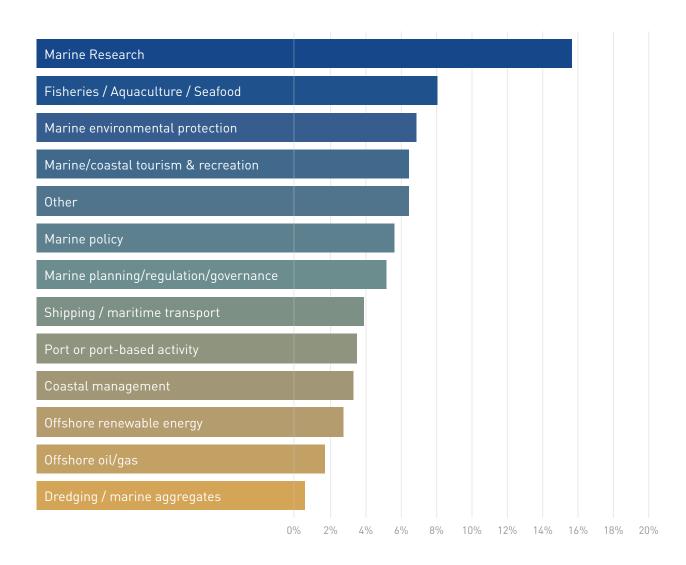
MEMBER OF HOUSEHOLD WORKING IN THE MARINE SECTOR



In answer to the question on whether the respondent or any member of their household worked in one of a range of specified marine sectors, 35% of all respondents answered positively.



DO YOU OR ANY MEMBER OF YOUR HOUSEHOLD WORK IN THE MARINE SECTOR?



The most common marine associated profession amongst the respondents that answered this question positively was marine research, with 16% noting that they or a member of their household worked in this area.

Fisheries/aquaculture/seafood was the next most frequently cited marine associated industry that respondents or members of their household were employed in, at 8%.

Following closely after was marine environmental protection (7% of total respondents), marine/coastal tourism and recreation, marine policy and other (6% of total respondents for each).

Respondents specified a range of professions under 'other' including marine education and communication, naval service, coast guard, commercial diving and marine chandlery.

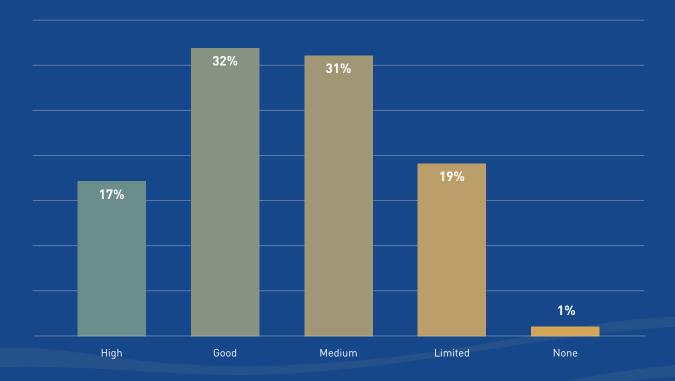


5.2 Knowledge of the Ocean and Sources of Information

These questions dealt with the public's self-rated knowledge of ocean, coastal and inland waters, their main sources of information and awareness of a selection of national and international initiatives.

Q: How would you rate your knowledge of the ocean, coastal and inland waters?

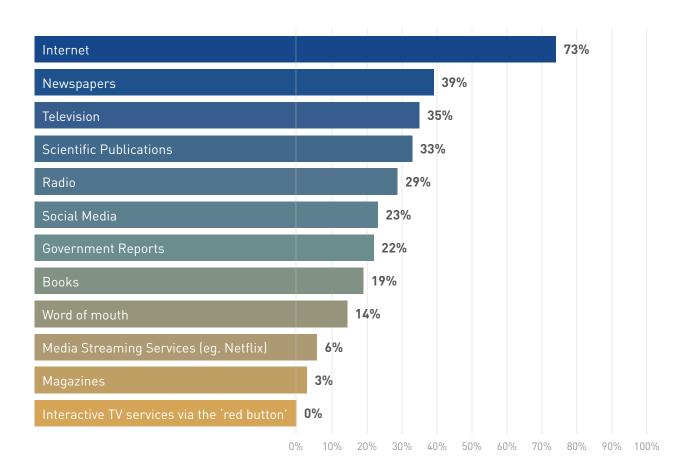
SELF-RATED KNOWLEDGE OF THE OCEAN, COASTAL AND INLAND WATERS



When asked how would you rate your knowledge of the ocean, coastal and inland waters, 17% of respondents rated it as being high, 63% rated it as being good or medium, and 20% of respondents rated their knowledge as limited or none.

Q: Please select the top 3 sources you use to receive factual information

SOURCES OF FACTUAL INFORMATION



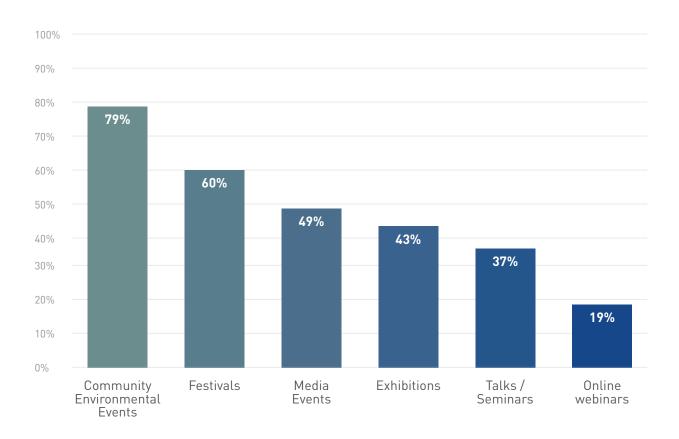
When asked to select from a list the top three sources used to receive factual information, the most commonly cited information source was the internet, included by 73% of respondents in their top three.

The next most popular information source was newspapers, with 39% of respondents selecting this option amongst their top three. Television and scientific publications were also popular with 35% and 33% of respondents, respectively, including these amongst their top three.

The results indicate the importance of the internet as a key consulted source for factual information. It is not possible to tell from this survey what type of internet content the public consult. However, many of the other options on the list can also be accessed via the internet such as newspaper content, scientific publications, government reports and radio.

Q: Please select the top 3 types of event in terms of how effective they are in informing Irish citizens about the ocean, seas, coastal and inland waters

TOP EVENTS FOR INFORMING IRISH CITIZENS ABOUT THE OCEAN, SEAS, COASTAL AND INLAND WATERS



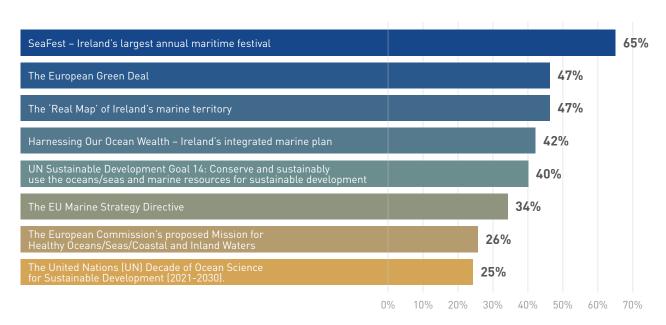
In response to the question, 'please select the top three types of event in terms of how effective they are in informing Irish citizens about the ocean, seas, coastal and inland waters', community environmental events, festivals and media events were the events chosen as being the most informative by respondents. Community environmental events were selected within their top three by 79% of respondents, while festivals and media events were selected amongst their top three events by 60% and 49% of respondents, respectively.

The types of events that received a lower rating were exhibitions, talks/seminars and, online webinars. These events are less interactive in nature.

Overall, the responses to this question suggest that events that the public can participate in are more effective as a way of sharing information about the ocean, seas, coastal and inland waters.

Q: Prior to undertaking this survey, please select from the list below, which items you were aware of (i.e. had heard of or had some knowledge about)

AWARENESS OF MARINE INITIATIVES



In this question, respondents were asked to identify from a list the ocean environment and policy initiatives that they were already aware of, including those both national and international in scope.

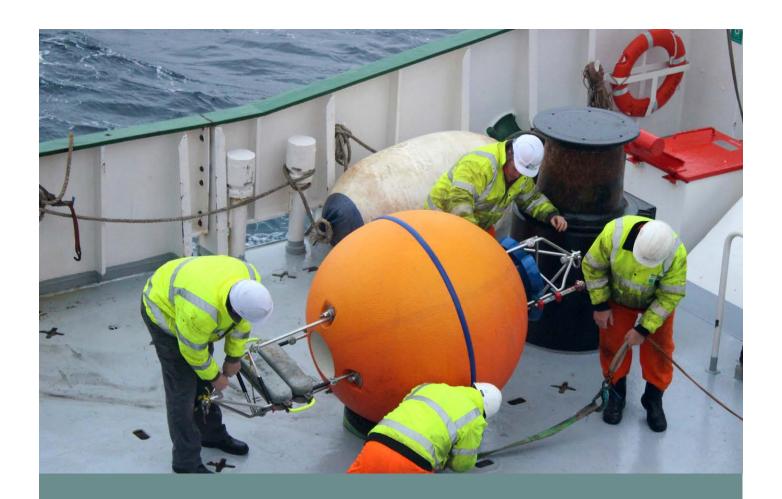
The most well known initiative was Seafest-Ireland's largest annual maritime festival, which 65% of respondents were familiar with.

Just under half of all respondents (47%) were aware of the European Green Deal and the 'Real Map' of Ireland's marine territory, while 42% of respondents had heard of Harnessing Our Ocean Wealth – Ireland's Integrated Marine Plan. The rest of the initiatives had a familiarity rating of between 25% and 40% amongst the respondents.

The higher level of familiarity with the national Seafest festival in comparison to the other initiatives suggests that local/

national initiatives that involve participation are a successful way for the public to become familiar with environmental issues. This complements the results of the previous question where community environmental events and festivals were rated highly for informing Irish citizens about the ocean, seas, coastal and inland waters.

Overall, the awareness of initiatives could be considered to be quite high amongst respondents. That the two actions that were the least familiar to respondents at 26% and 25% respectively were the European Commission's proposed Mission for Healthy Oceans, Seas, Coastal and Inland Waters and the United Nations Decade of Ocean Science for Sustainable Development (2021–2030), is unsurprising considering that both of these initiatives are the newest and will not start until 2021.



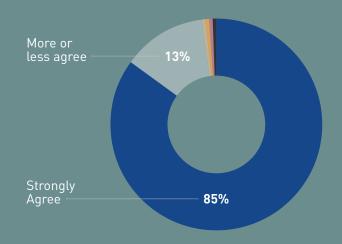
5.3 Opinions on Marine Issues

In order to gauge the public's view of current marine issues respondents were asked to indicate their thoughts on a number of statements concerning the ocean in relation to health, economy, education and research. They were also asked their opinion on the importance for society of marine data collection, mapping the ocean seabed and whether they thought the establishment of a European ocean agency to be a good idea.

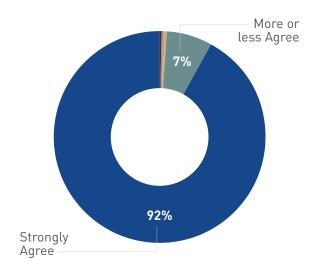
Q: Please indicate what you think of the following statements:

THE OCEAN IS BEING DAMAGED BY HUMAN ACTIONS

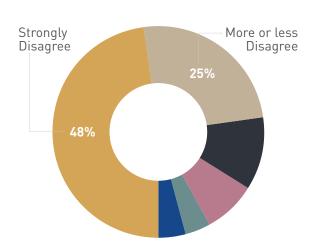
- Strongly agree
- More or less agree
- Neither agree nor disagree
- More or less disagree
- Strongly disagree
- Don't know



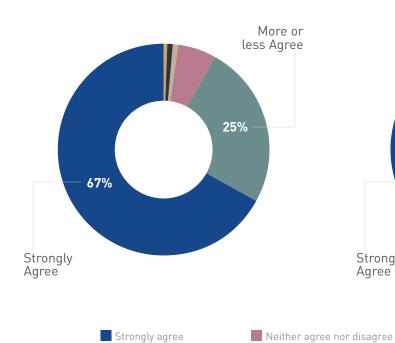
MORE ACTION IS NEEDED TO IMPROVE THE HEALTH OF THE OCEAN



THERE IS SUFFICENT TEACHING ABOUT THE OCEAN AND INLAND WATERS IN OUR SCHOOLS

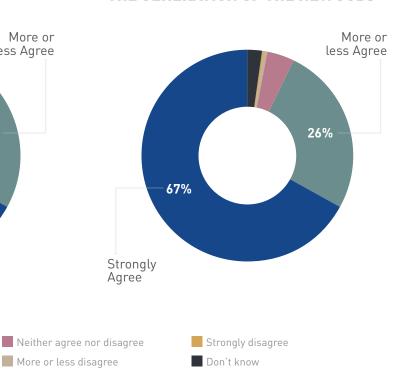


THE HEALTH OF THE OCEAN AND MY HEALTH ARE CONNECTED



More or less agree

THE OCEAN, SEAS AND INLAND
WATERS HAVE THE POTENTIAL TO
SUPPORT ECONOMIC GROWTH AND
THE GENERATION OF THE NEW JOBS



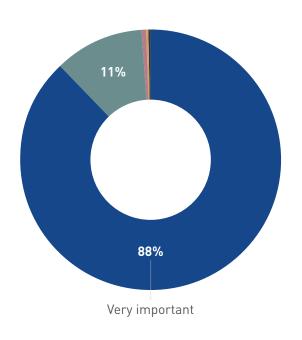


Overall, the responses to the statements posed indicate that the public care strongly about the ocean, with the strongest agreement being around the statements that the ocean is being damaged by human actions and more action is needed to improve its health. Most respondents also agree that there is a connection between their own health and the health of the ocean, and that economic growth and new jobs can be supported by the ocean, seas and inland waters.

The statement that had the least definite response was that about teaching about the ocean and inland waters in schools. While approximately 73% either strongly, or more or less, disagreed that there was sufficient teaching in schools, a notably high percentage of respondents indicated that they either didn't know or neither agreed or disagreed with this statement (19%) compared to the other statements. Considering the age profile of respondents, this may be due to the lack of familiarity of respondents with the school curriculum.

Q: In your opinion, how important to society in general is the collection of marine environmental data?

OPINION ON IMPORTANCE OF MARINE ENVIRONMENTAL DATA COLLECTION



When asked how important respondents thought the collection of marine environmental data was, 88% considered it very important to society.

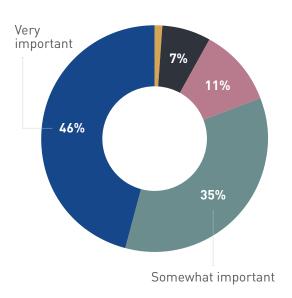
This result is in keeping with the responses provided to the previous statements, indicating that respondents are highly aware of the connections between the ocean and health and economy.





Q: In your opinion, how important to society in general is a high-resolution map of the ocean seabed?

OPINION ON IMPORTANCE OF A HIGH-RESOLUTION MAP OF THE OCEAN SEABED



Just under half of respondents (46%) consider that a high-resolution map of the ocean seabed is very important to society in general while 35% consider it somewhat important.

Almost one fifth of respondents (19%) answered that they thought such a map was either of limited importance, not important at all or didn't know if it was important, indicating that the practical applications of seabed mapping for society are not always obvious to the public and may merit further communication efforts.

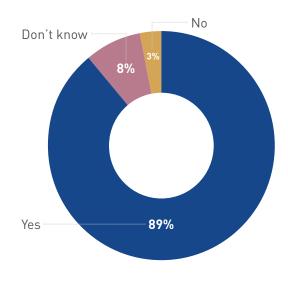


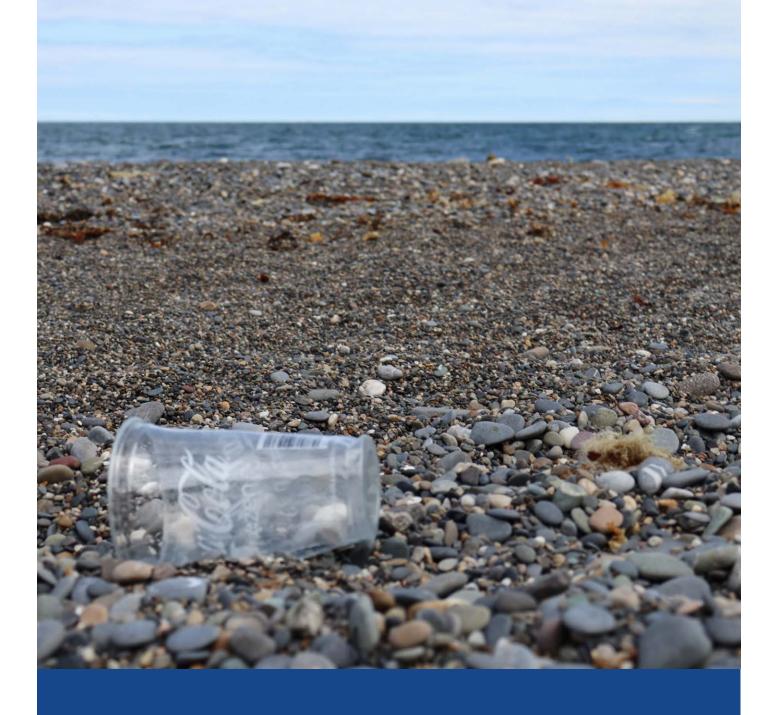
Q: There is currently no dedicated European agency for the ocean and seas. Do you think it would be a good idea to establish a 'European Ocean Agency'?

VIEW ON ESTABLISHMENT OF A EUROPEAN OCEAN AGENCY

The majority of respondents (89%) thought that the establishment of a 'European Ocean Agency' would be a good idea.







5.4 Concerns and Policy Priorities

The questions in this section explored what marine environmental issues were of most concern to the public and what climate change and marine policy issues respondents thought should be prioritised by the European Union.

Q: From the following list, please select the 3 issues that concern you most

- Ocean current changes;
- Melting sea-ice;
- Sea level rise;
- Coastal flooding;
- Changes in the frequency of extreme weather events (e.g. storms);
- Environmental impacts of aquaculture (fish or shellfish farming);

- · Overfishing;
- Effects of marine invasive species;
- Oceans becoming more acidic;
- Sea temperature changes;
- Destruction of habitats at the coast or in the sea;
- Pollution at the coast or in the sea;
- Coastal erosion;
- Changes in the distribution of marine wildlife:
- Increased jellyfish blooms/swarms.

TOP THREE ISSUES OF CONCERN



'Pollution at the coast or in the sea' was the issue of most concern to respondents, chosen by 61% as being amongst their top three from the list of marine environmental issues provided.

'Changes in the frequency of extreme weather events (e.g. storms)' and 'overfishing' were the other most frequently cited issues of concern, included by 38% and 32% of respondents, respectively, amongst their top three.

Similar results were obtained in a previous pan-European survey of public awareness, concerns and priorities about anthropogenic impacts on marine environments, carried out as part of the EU FP7 CLAMER project³

(Climate Change and Marine Ecosystem Research) in 2011. As part of that survey, the public in fourteen European countries were asked about their level of concern for the same marine environmental issues. Similar to the results obtained in the current survey, the results from the CLAMER survey showed that 'pollution at the coast or in the sea' was the issue of most concern to the Irish public, followed by 'changes in the frequency of extreme weather events (e.g. storms)' and then 'coastal flooding'.

The similarity in results between the surveys carried out in 2011 and 2020 indicate that pollution and changes in the frequency of extreme weather events are longstanding issues of concern for the Irish public.

³ CLAMER, Climate Change & European Marine Ecosystem Research. http://www.vliz.be/projects/clamer/awareness.html

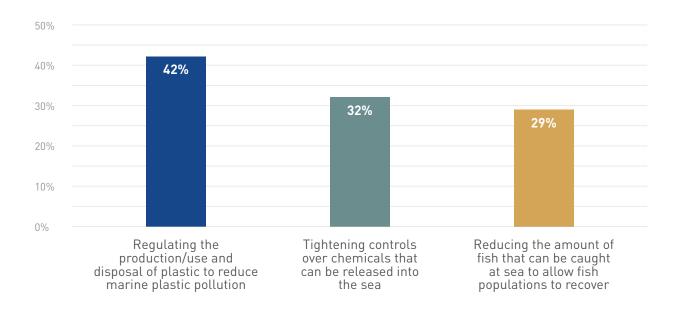
Q: If you had to decide which climate change and marine policy issues should be prioritised by the European Union, which 3 would you select from the list below?

The list of climate change and marine policy issues that respondents were asked to select from comprised:

- Researching climate change impacts at the coast or in the sea;
- Developing technologies to remove carbon dioxide from the atmosphere;
- Improving coastal defences to help prevent coastal flooding and erosion;
- Enabling coastlines to respond naturally to rising sea levels;
- Increasing the amount of energy from low carbon sources;
- Reducing the amount of fish that can be caught at sea to allow fish populations to recover;

- Strengthening commitments to safeguard habitats and marine life;
- Tightening controls over commercial activities allowed in the sea (e.g. oil rigs or sand extraction):
- Tightening controls over chemicals that can be released into the sea;
- Reducing greenhouse gas emissions from ships;
- Agreeing on international commitments to cut greenhouse gas emissions;
- Creating a circular economy to reduce waste and marine pollution;
- Regulating the production, use and disposal of plastic to reduce marine plastic pollution;
- Increasing the protection and conservation of the marine environment through establishment of Marine Protected Areas.

CLIMATE CHANGE AND MARINE POLICY ISSUES THAT SHOULD BE PRIORITISED BY THE EUROPEAN UNION





'Regulating the production, use and disposal of plastic to reduce marine plastic pollution' was the policy issue selected most frequently by respondents (42%) amongst their top three as a matter to be prioritised by the European Union.

Other policy issues that respondents thought should be prioritised by the European Union from the list provided were 'tightening controls over chemicals that can be released into the sea' and 'reducing the amount of fish that can be caught at sea to allow fish populations to recover', selected by 32% and 29% of respondents amongst their top three, respectively.

The 2011 CLAMER survey referred to above posed the same question (the only difference being three less options to select from) and had similar results from the Irish public, with the two most popular policy priorities selected during the CLAMER survey ('tightening controls over chemicals that can be released into the sea' and 'reducing the amount of fish that can be caught at sea

to allow fish populations to recover') also being in the top three policy priorities of respondents in this survey.

In the current survey, the issue of marine plastic was the most selected policy issue for priority. This was not available as one of the options to select in the CLAMER survey. However, a more recent survey carried out in multiple EU countries in 2019 also reported 'plastic pollution of marine waters' as the threat that respondents felt most concerned about (H2020 SOPHIE Consortium, 2020).

As for the issues of concern dealt with in the previous question, the comparable results for this question asked of the Irish public in 2011 as part of the CLAMER survey and again in this survey in 2020, indicate that both the issues of regulating the release of chemicals into the sea and fishing regulations, are longstanding topics of concern for the Irish public. It also suggests that the topic of plastic pollution is high in the public's consciousness.

6. CONCLUSION

The results of this survey provide insight into the perceptions of the Irish public surrounding current marine issues and priorities for the protection of the marine environment.

At a time when a number of ambitious initiatives are getting underway, including the European Green Deal which has set a target of reaching climate neutrality by 2050, and the UN Decade for Ocean Science for Sustainable Development (2021-2030), it is valuable to have a current understanding of the public's perceptions and concerns which can be used to inform future activities associated with these initiatives and policy developments that will require the balancing of economic development with environmental protection and human wellbeing.

Citizen participation is also an important component of the forthcoming Horizon Europe Framework Programme, spanning 2021 to 2027. The information from this survey will feed into the further planning of the Mission on Healthy Oceans, Seas, Inland and Coastal Waters. Part of the mission involves raising awareness of the importance of healthy oceans, seas, coastal and inland waters among citizens and involving citizens to help develop solutions on a range of issues.

The results of this survey demonstrate that the Irish public care strongly about the ocean and are important stakeholders in planning for its future.





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