Ocean Literacy Technical Report
Northern Ireland 2022

***Sustainability** at the heart of a living, working, active landscape valued by everyone.*

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Methodology Note

Background and Objectives

The term Ocean Literacy is defined as 'an understanding of the ocean's influence on a person and their influence on the ocean'. DAERA and the other UK administrations are seeking this information to inform current and future policy making to achieve the UK vision of clean, safe, healthy, biodiverse and productive seas. This incorporates the overall objective of Good Environmental Status and will assist us in the implementation of the Marine Plan for Northern Ireland.

It is critical that DAERA raises awareness on the status of the marine environment and the need to protect it through communication, outreach and engagement with the public and key stakeholders. There is also a need to raise awareness of climate change, how our seas are impacted and how our seas and intertidal areas can mitigate climate change through blue carbon habitats, which remove carbon from the earth's atmosphere. A better understanding of our society's grasp of these issues, will assist DAERA in how to communicate and affect change in better protecting our marine environment.

Methodology

The research used an online panel method. Invitations were sent to members of online panels using BMG's 'panel blend' approach which uses simultaneous survey invitations across multiple panels to spread fieldwork. The method is designed to improve the quality of outputs by hedging against the risk of selecting a single panel provider.

To ensure maximum accessibility, in addition to desktop and laptop PCs, respondents were able to complete the survey on tablet and mobile devices.

A breakdown of interviews achieved by the various sub-groups is provided in the weighting schema section under data collection.

Fieldwork

Fieldwork was conducted between 22nd September to the 24th October 2022. A small pilot of 65 interviews was conducted on the 22nd September with the responses collected used to allow checks that data was being captured correctly and that the script was working as intended.

For reference, the following number of interviews were broadly achieved per week:

- Week 1 c. 65
- Week 2 c. 150
- Week 3 c. 300
- Week 4 c. 300
- Week 5 c. 200
- Week 6 c. 50

Quotas were set on region and age based on the latest Office for National Statistics 2020 mid-year estimates to ensure the interviews completed were representative of the population on this basis. These were monitored closely and any groups that were under-represented were sent further invitations and reminders in order that we achieved as close as possible to the original quotas set. Table 1 details the targets that were set.

In total 1,081 interviews were achieved across Northern Ireland.

Table 1: Breakdown of interview targets set

Sub-group	Target
Region	**Northern Ireland**
Eastern	343
Northern	400
Southern	115
Western	142
Age	**Northern Ireland**
16 to 24	134
25 to 44	326
45 to 64	327
65+	213

In addition to this all respondents had to have been a permanent resident in Northern Ireland, England, Wales or Scotland for at least the last 5 years.

Additional variables were also monitored during fieldwork to ensure a spread of responses were received:

- Coastal and non-coastal
- Gender
- Ethnicity
- IMD quintiles
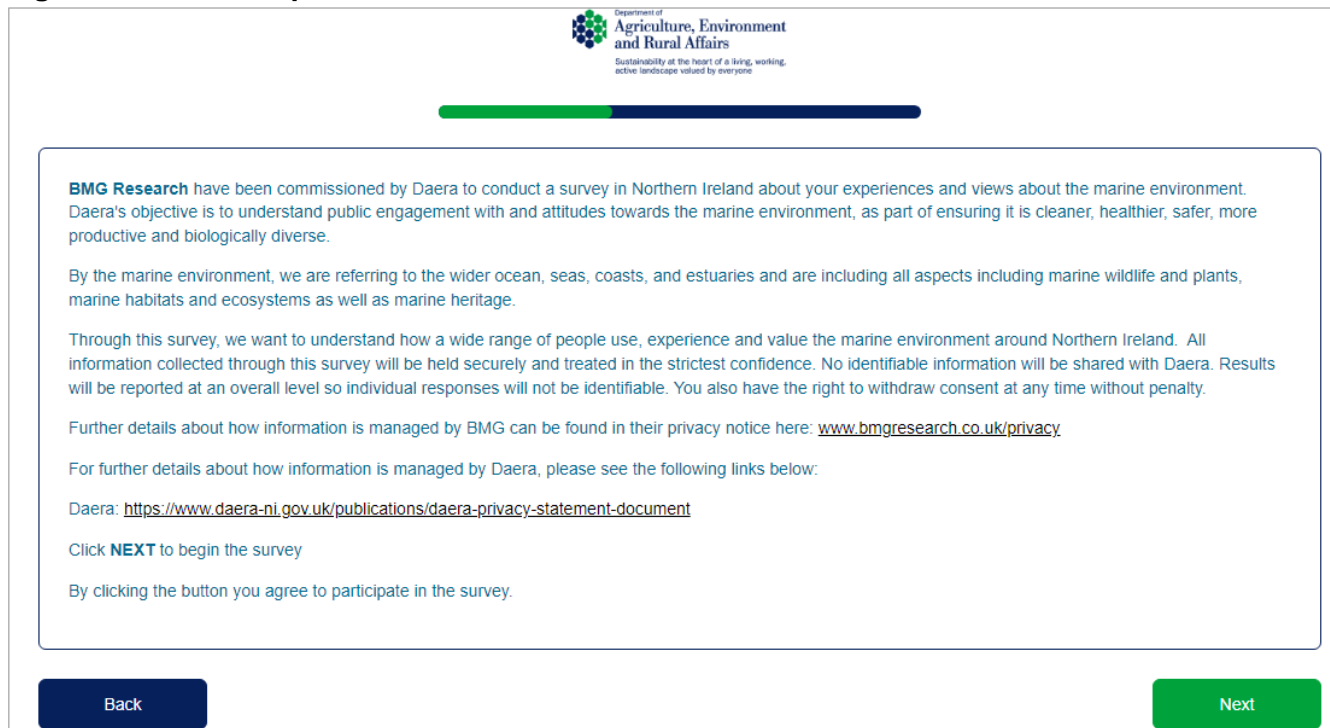- Urban/rural

Questionnaire scripting, testing and review

Questionnaire design

The survey used the questionnaire from the 2022 Defra survey entitled Survey on Ocean Literacy in the UK with changes to question text and answer lists to make it applicable for Northern Ireland. In addition to this Q25 (Thinking about the last 12 months have you made any visits to a marine environment) was removed. Instead Q26 was asked of everybody to ensure respondents understood what was meant by a marine environment and a not in the last 12 months option added. Respondents were then routed based on their responses to Q26 to subsequent questions and a Q25 variable calculated based on response to Q26.

Scripting and testing

The final signed-off questionnaire was then scripted into an online interview format using Confirmit software, ensuring the look and feel of the script was consistent throughout which included integrating Daera branding. Once the script had gone through BMG Research's internal checks and signed off, a test script was provided to Daera for reference and review.

Figure 1: Online script screenshot

Data protection and management

Panellist information is treated in accordance with the strict laws on data protection with surveys always carried out anonymously. BMG Research reviews all data protection and security procedures ahead of using any panel providers.

As Registered Data Handlers, BMG Research ensure that all data are held and transferred securely. Ahead of taking part in the survey all respondents were given access to BMG Research's privacy notice as well as access to how information is managed by Daera. BMG Research's privacy notice details how we keep data secure and provides contacts details to respondents in order that they can contact us.

Although full postcode was collected from respondents, the survey was implicit with regards to how this would be used and this has not been passed back to Daera.

Quality checks

In addition to the verification checks that our panel providers undertake, a full review of the data collected has been undertaken which included routing checks on questionnaire variables, validating the time taken for each interview to be completed, validating the percentage of don't knows recorded for each respondent and reviewing all verbatim responses collected.

Survey length

The median time for completion (excluding cases removed for completing the survey at excessive speed or those who took over 2 hours to complete and those started one day and then finished on another day) was 17 minutes and 3 seconds, with a mean completion time of 20 minutes and 21 seconds.

	Time (hh:mm:ss)
Mean	00:20:21
Median	00:17:03

Weighting schema

Survey results are weighted to be representative of the population of interest. Weighting is the standard approach used to correct for the fact that those interviewed are not a perfect fit to that population.

To correct for discrepancies between the profile of the interviewed sample and the profile of the Northern Ireland population, post-stratification weights were applied. As previously mentioned, target variables, based on the latest available data provided by the Office of National Statistics (ONS), were as follows:

- Region – Northern Ireland (Based on population mid-year estimates from the Office for National Statistics)
- Age (Based on population mid-year estimates from the Office for National Statistics)

Weighting was applied to ensure the final sample was representative.

In the Defra Ocean Literacy survey the data was weighted by Coastal classification as well. It was not possible to weight the Northern Ireland data by Coastal classification due to a lack of population stats for those classified as Coastal ie within 3km of the coast. For reference before weighting the coastal breakdown was 30% coastal vs 70% non-coastal and then after age and region weighting this was 28% coastal vs 72% non-coastal.

Table 3 below details the weighting efficiency, the effective sample size after weighting, as well as the maximum and minimum weight applied to a single case.

Table 3: Weighting details

	Northern Ireland
Unweighted sample size	1081
Weighting efficiency	85%
Effective weighted sample size	920
Minimum weight	0.50
Maximum weight	2.38

Table 4 shows the proportion of the interviews achieved against the proportions that the data has been weighted to.

Table 4: Breakdown of interviews achieved vs weights

Sub-group	Northern Ireland	
Region	**Achieved**	**Weight**
Eastern	41%	34%
Northern	38%	40%
Southern	11%	12%
Western	10%	14%
Age	**Achieved**	**Weight**
16 to 24	22%	13%
25 to 44	33%	33%
45 to 64	34%	33%
65+	11%	21%

Appended Data

Based on the postcode provided by the respondent a number of variables were derived and these have been appended to the raw data. These variables are as follows:

- **Northern Ireland Region:** Based on postcode address lookup file sourced from Office for National Statistics November 2021 release

- **Local authority (District):** Based on postcode address lookup file sourced from Office for National Statistics November 2021 release

- **Distance to coast:** The distance at which each respondent lived from the coast was calculated by BMG's data science team. The tool developed used geo-coordinates for the UK coastline used in a 2012 academic study[1]. Using each respondent's postcode, the distance in kilometres that each respondent lives from the coast was calculated. The distances reported were calculated by ascertaining the distance as the crow flies to the nearest point on the UK coastline.

- **Coastal classification (Northern Ireland):** Those respondents who lived within 3km of the coast were defined as Coastal and all others were defined as non-coastal

- **Urban rural classification:** Based on postcode address lookup and sourced from Office for National Statistics for Northern Ireland.

- **IMD Decile:** Sourced from Office for National Statistics November 2021 release and built at a country level – 1 (least deprived) to 10 (most deprived)

- **IMD Rank:** Sourced from Office for National Statistics and built at country level based on the ranking of each LSOA.

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[1] Wheeler,B.W., White, M., Stahl-Timmins, W., Depledge, M.H., 2012. '*Does living by the coast improve health and wellbeing?'* Health and Place 18, 1198-1201 doi:10.1016/j.healthplace.2012.06.015

Data tables

BMG Research have supplied the following outputs for this research:

- A technical report which provides the full details of the research undertaken
- A headline report
- A weighted set of data tables with agreed breaks
- A full data file in Excel with survey variables and derived variables in an agreed format.

A full set of cross tabulations have been supplied which include the following breaks for each survey question.

- Country
- Region
- Age group (5 groups)
- Gender
- Ethnicity (2 groups)
- Coastal (based on with 3km of the coast)
- Awareness of challenges facing global marine environment (Grouped summary codes: Poor vs Good)
- Have visited marine environment (Yes, Not in last 12 months, Never)
- How important is protecting the marine environment to you personally (Grouped summary codes: Important vs Not important)
- Religion
- Whether respondent has a health condition expected to last 12 months or more
- Whether this health condition limits their ability to carry out day-to-day activities

Data tables

The data tables also include some additional breaks such as IMD Decile, life satisfaction, environments visited or activities undertaken for some of the survey questions.

The cross tabulations are based on weighted data and provide details of the weighted base values, the effective sample size and unweighted base values for each sub-group.

The cross tabulations also show significant differences based on effective sample size and highlight based on the proportions where there are significant differences either between two columns within a sub-group or against the overall total (excluding the column that is being tested). This was done using a z test which gives the same result as a chi-squared test (i.e. when using a two-tailed pooled z-test) with 1 degree of freedom and with the added benefit of being able to test the direction of the significance (i.e. two tailed and one tailed tests). In general, attention is drawn to differences between estimates only at the 5% significance level, thus indicating that there is less than 5% probability that the observed difference could be due to random sampling variation when no difference occurred in the population from which the sample is drawn.

In addition to this, the Northern Ireland data has been combined with England, Wales and Scotland data collected earlier in 2022 to produce a UK wide data set for UK analysis.

Confidence Intervals

A confidence interval is a measure of the range within which it is probable that a population value lies. The wider the confidence interval, the more variation there is in an estimate of the population value. It is typical to calculate confidence intervals using a 95% confidence level. Strictly speaking, confidence intervals cannot be applied to quota samples because they do not use equal or known probabilities of selection. However, it is common practice to derive them and this can give some indication of the relative levels of variation to help users of the data understand that the percentages provided are statistics, not absolute numbers.

Table 5 shows the confidence intervals for a selection of sample sizes for a range of survey estimates (e.g. percentage of survey respondents). As this table demonstrates, confidence intervals narrow (meaning greater precision about the true population value) when the sample size increases and/or where responses are more 'polarised'.

Table 5: Confidence intervals (expressed as +/-%) for a section of samples and survey responses

Variable	Unweighted Sample size	10% / 90%	30% / 70%	50% / 50%
Total sample	**1081**	**1.8**	**2.7**	**3.0**
Region				
Eastern	447	2.8	4.3	4.6
Northern	413	2.9	4.4	4.8
Southern	115	5.5	8.4	9.1
Western	106	5.7	8.7	9.5
Age				
16 to 24	234	3.8	5.9	6.4
25 to 44	361	3.1	4.7	5.2
45 to 64	362	3.1	4.7	5.2
65+	124	5.3	8.1	8.8
Coastal				
Yes	325	3.3	5.0	5.4
No	756	2.1	3.3	3.6

Appendices

The Questionnaire

INTRODUCTION

BMG Research have been commissioned by Daera to conduct a survey in Northern Ireland about your experiences and views about the marine environment. Daera's objective is to understand public engagement with and attitudes towards the marine environment, as part of ensuring it is cleaner, healthier, safer, more productive and biologically diverse.

By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.

Through this survey, we want to understand how a wide range of people use, experience and value the marine environment around Northern Ireland. All information collected through this survey will be held securely and treated in the strictest confidence. No identifiable information will be shared with Daera or anyone else. Results will be reported at an overall level so individual responses will **not** be identifiable. **You also have the right to withdraw consent at any time without penalty.**

Further details about how information is managed by BMG Research can be found in their privacy notice here:

www.bmgresearch.co.uk/privacy

For further details about how information is managed by Daera please see the following info from the links below:

Daera: https://www.daera-ni.gov.uk/publications/daera-privacy-statement-document

Please click on next to continue.

SCREENING SECTION
ASK ALL
D0. How long have you been a permanent resident of the UK, which includes England, Scotland, Wales or Northern Ireland?
SINGLE CODE
Please select one answer only

> 1 year or less
> 2 to 4 years
> 5 to 9 years
> 10 or more years
> Not a permanent resident of Northern Ireland
> Prefer not to say

SCREEN OUT IF LESS THAN 5 YEARS

ASK ALL

D1.   What is your full postcode? (Please note that this information will only be used by BMG Research to explore geographical variation in responses. No respondent will be identifiable from this data and postcode will not be passed back to Daera).

Open text box (allow 7 digits format check)
[Please type in your postcode]
Don't know
Prefer not to say

SCREEN OUT INVALID POSTCODES OR IF DK OR PREFER NOT TO SAY

S1.
ASK ALL

S2.   What was your age on your last birthday?
Open text box (SCREEN OUT under 16s)
[Please type in your age]
Prefer not to say

ASK IF 0 = Prefer not to say
S3.   In that case, can you put your age into one of the following age bands?
SINGLE CODE
Please choose one age band only

1. 16 to 24
2. 25 to 34
3. 35 to 44
4. 45 to 54
5. 55 to 64
6. 65 to 74
7. 75+

Prefer not to say

SECTION 1: THE GLOBAL MARINE ENVIRONMENT
The following questions are about your views on the global marine environment. By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.

ASK ALL
Q1. **What is the first phrase or words that come to mind when you think about the marine environment?**
OPEN TEXT (Limit of 100 characters)
Don't know

ASK ALL
Q2. **How do you feel when you think about the marine environment? Please select the three emotions which come closest to how you feel.**
MULTICODE RANDOMIZE ORDER
Please select a maximum of 3.
1. Anger
2. Anxiety
3. Boredom
4. Curiosity
5. Fear
6. Frustration
7. Happiness
8. Calm/Relaxed
9. Hopelessness
10. Shame
11. Surprise
12. Excitement
13. Enthusiastic
14. Awe/Wonder
15. Guilt
16. Inspired
17. Concern
18. Other (please specify one word)

Don't know

ASK ALL
NQ1. What are the first images, phrases, or words that come to mind when you think about each of the following marine terms?
1. Salt marsh
2. Seagrass
3. Blue carbon
OPEN TEXT (Limit of 100 words)
Don't know

ASK ALL

Q3.   The following are principles about the marine environment. Please indicate how true you believe each statement to be.

DYNAMIC GRID SINGLE CODE ROTATE STATEMENTS

1. The Earth has one big ocean with many features.
2. The ocean and life in the ocean shape the features of Earth.
3. The ocean is a major influence on weather and climate.
4. The ocean made the Earth habitable.
5. The ocean supports a great diversity of life and ecosystems.
6. The ocean and humans are inextricably linked.
7. The ocean is largely unexplored.

RESPONSE CODES

Please select one answer only.

1. Completely True
2. Mostly True
3. Somewhat True
4. Slightly True
5. Not at all True

Don't know

ASK ALL

Q4.   How would you rate the health of the global marine environment?

SINGLE CODE.

Please select one answer only.

1. Very Poor
2. Poor
3. Neither good nor poor
4. Good
5. Very good

Don't know

ASK ALL

Q5.   How would you rate the health of the marine environment around Northern Ireland?

SINGLE CODE.

Please select one answer only.

1. Very Poor
2. Poor
3. Neither good nor poor
4. Good
5. Very good

Don't know

ASK ALL
Q6. **How would you rate your awareness of challenges facing the global marine environment?**
SINGLE CODE.
Please select one answer only.
1. Very good
2. Good
3. Neither good nor poor
4. Poor
5. Very Poor

Don't know

ASK ALL
Q7. **Please indicate how familiar you are with each of these terms by selecting the relevant box**
DYNAMIC GRID STATEMENTS. Single code. ROTATE ORDER
Please select one answer only.
1. Marine Protected Areas
2. Eutrophication
3. Sustainable development
4. Ecosystem services
5. Good Environmental Status
6. Climate change
7. Natural capital
8. Nature based solutions
9. Sustainable fishing
10. Biodiversity
11. Ocean literacy
12. Marine citizenship
13. Ocean acidification
14. Carbon sequestration
15. Marine Conservation Zones
16. Blue carbon
17. United Nations Decade of Ocean Science
REPONSE CODES.
1. Know and understand
2. Heard of and have some understanding
3. Heard of but do not understand
4. Have never heard of the term

Don't know

SECTION 2: YOUR NATIONAL MARINE ENVIRONMENT
The following questions all refer to your views on the marine environment in Northern Ireland. By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.
ASK ALL
Q8.   How important is protecting the marine environment to you personally?
SINGLE CODE
Please select one answer only.
1. Very important
2. Important
3. Neither important nor unimportant
4. Not very important
5. Not at all important

Don't know

ASK ALL
Q9.   In your opinion, what are the three most important benefits that society gains from the marine environment in Northern Ireland?
MULTICODE. ROTATE ORDER
Please select up to three.
1. Oil and gas
2. Renewable energy (e.g. from offshore wind or tidal power)
3. Food to eat e.g. fish, shellfish
4. Natural forms of coastal protection
5. Places to support mental health and wellbeing
6. Tourism
7. Places to support physical health and exercise
8. Recreation
9. Transport and shipping
10. Diverse habitats for marine plants and animals
11. A sense of identity
12. History and heritage
13. Provide material for construction and infrastructure
14. Supporting the wider economy
15. Research and education
16. Disposal of waste
17. Weather and climate control
18. Oxygen production, carbon capture and storage
19. Other (please specify)

Don't know

ASK ALL

Q10. Which of the following if any, do you think pose the most threat to the marine environment in Northern Ireland?

MULTICODE. ROTATE ORDER

Please select all that apply

1. Climate change
2. The ocean becoming more acidic
3. Changes to ocean currents
4. Destruction of habitats at the coast or in the sea
5. Loss of marine species
6. Sea level rise
7. Chemical pollution
8. Marine litter and plastic pollution
9. Non-native, alien or introduced species
10. Coastal erosion
11. Overfishing
12. Lack of public understanding about marine environment
13. Changes in species distribution
14. Land-based pollution
15. Construction in the seas or ocean
16. Other (please specify)

Don't know

The following questions concern your views towards climate change and human activity.

ASK ALL

Q11. Thinking about the changing climate and human activity, which of the following statements comes closest to your view?

SINGLE CODE

Please select one answer only.

1. The climate is changing due to human activity
2. The climate is changing but this is not due to human activity
3. The climate is changing due to a combination of human activity and other natural processes
4. We cannot say whether the climate is changing due to human activity
5. We cannot say whether the climate is changing

Don't know

ASK IF Q11 = 1 or 2 or 3
NQ2. The following are statements about climate change. Please indicate how much you agree with each statement.
DYNAMIC GRID SINGLE CODE ROTATE STATEMENTS
1. Climate change is not the greatest threat to our natural world.
2. Climate action is urgently needed.
3. Nature can help to reduce climate change impacts.

RESPONSE CODES
Please select one answer only.
1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree
Don't Know

ASK IF Q11 = 1 or 2 or 3
Q12. The following activities could potentially address the effects of climate change on the marine environment in Northern Ireland. In your opinion, which three do you think are the most important?
MULTICODE. ROTATE ORDER
Please select up to three.
1. Improving scientific understanding of climate change impacts on the marine environment (e.g. warming seas)
2. Developing technologies to remove carbon dioxide and other greenhouse gases from the atmosphere
3. Improving coastal defences to help prevent coastal flooding and erosion
4. Protecting and restoring habitats which protect against rising sea levels
5. Agreeing on international commitments to cut greenhouse gas emissions
6. Increasing the amount of energy from low carbon sources (e.g. wind or tidal power)
7. Reducing greenhouse gas emissions from ships and aircraft
8. Protecting and restoring marine environments through carbon capture and storage
9. Using overseas aid to address climate change in international marine environments
10. Other (specify)
Don't know

ASK ALL

NQ3. Marine Protected Areas are specific areas of the marine environment which are managed to achieve long-term nature conservation and sustainable use. To what extent do you support or oppose the creation of Marine Protected Areas in Northern Ireland?

SINGLE CODE

Please select one answer only.

1. Strongly support
2. Tend to support
3. Neither support or oppose
4. Tend to oppose
5. Strongly oppose

Don't know

ASK ALL

NQ4. Do you think the following impacts of windfarms (including wind turbines and power transmission cables) are greater on land or in the marine environment?

GRID SINGLE CODE ROTATE ORDER

1. Impacts of wind farms on people nearby
2. Impacts of wind farms on available space for other uses
3. Impacts of wind farms on the nearby natural environment

RESPONSE CODES

No impact on land or in the marine environment

Greater impact on land

Equal impact on land or in the marine environment

Greater impact in the marine environment

Don't know

ASK ALL

Q13. The following activities all address other issues affecting the marine environment in Northern Ireland. In your opinion, which three do you think are the most important?

MULTICODE. ROTATE ORDER

Please select up to three.

1. Restricting fisheries to allow fish populations to recover
2. Tightening controls over commercial activities allowed in the sea (e.g. oil exploration or aggregate extraction)
3. Tightening controls to reduce marine pollution from industry and/or agriculture
4. Strengthening commitments to safeguard habitats and marine life
5. Changing consumption and behaviour to reduce waste and marine pollution
6. Regulating the production, use and disposal of single-use plastics to reduce marine plastic pollution
7. Increasing the protection and conservation of the marine environment through effective Marine Protected Areas
8. Supporting more people to engage with the ocean e.g. including the marine environment in the primary and secondary school curriculum
9. Using overseas aid to protect marine environments in other countries

Don't know

SECTION 3: YOU AND THE MARINE ENVIRONMENT

By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.

ASK ALL

Q14. Thinking about the last 12 months, where has your knowledge/ information about the marine environment in Northern Ireland mostly come from?

MULTICODE. ROTATE ORDER

Please select a maximum of 3

1. Formal education (schools, universities etc)
2. Aquariums / Zoos / Visitor Centres / Museums
3. Social media
4. Television / radio
5. Campaigns (e.g. environmental charities)
6. Films / Nature / Wildlife documentaries
7. Friends / family
8. News (online and newspapers)
9. Books / magazines
10. Festivals / Exhibitions
11. Talks / seminars
12. Community events
13. Celebrities and/or influencers
14. Gov.uk websites / [Daera] online site https://www.daera-ni.gov.uk/topics/marine
15. Other (specify)

Don't know

ASK ALL

Q15. Which of the following activities, if any, have you done to protect the marine environment in Northern Ireland?

MULTICODE. ROTATE ORDER

Please select all that apply

1. I voted for political parties with strong policies to protect the marine environment
2. I contacted a Member of the Legislative Assembly (MLA) or council member about an issue affecting the marine environment
3. I signed petitions about issues affecting the marine environment
4. I volunteered time to support the marine environment (e.g. beach cleans)
5. I have made changes to my lifestyle to benefit the marine environment
6. I donated money to support the marine environment
7. I tried to persuade people I know in person to do more to help the marine environment
8. I posted online content related to the marine environment
9. I attended rallies and demonstrations in support of the marine environment
10. I participated in science and research projects (e.g. citizen science)
11. I have subscribed to an environmental organisation (e.g. RSPB, National Trust)
    If yes, which environmental organisations have you subscribed to?
    …………………………………………..
    OPEN TEXT (Limit to 50 words)
12. Other (please specify)
13. None of the above

Don't know

ASK IF Q15 = 1-12

Q16. What aspects of the marine environment was your activity intended to protect?

MULTICODE. ROTATE ORDER

Please select all that apply

1. Seabirds
2. Marine mammals
3. Coastal habitats
4. Marine habitats
5. Landscape
6. Seascape
7. Traditional skills/crafts/culture
8. Building/monument/pier
9. Shipwreck
10. Other (please specify)

Don't know

ASK ALL
Q17. What impact do you think your lifestyle has on the marine environment of Northern Ireland?
SINGLE CODE
Please select one answer only
1. Strong positive impact
2. Positive impact
3. No impact
4. Negative impact
5. Strong negative impact

Don't know

ASK ALL
Q18. Thinking about the purchases you have made and your use of packaging, which of the following activities have you done in the last 12 months where possible?
MULTICODE. ROTATE ORDER
Please select all that apply.
1. Reduced your use of single use plastic e.g. plastic straws and bottles
2. Recycled more
3. Reduced use of disposable cups, plates and/or cutlery
4. Avoided products with excess packaging
5. Bought second-hand items
6. Avoided products known to harm the marine environment
7. Re-use any plastic as much as possible
8. Other (please specify)
9. None of the above
10. Don't know

Q19. Do you ever purchase seafood (fish or shellfish)?
SINGLE CODE
Please select all that apply.
1. Yes
2. No

Don't know

ASK IF Q19 = 1
Q20. When buying seafood (fish or shellfish), to what extent, would each of the following influence your purchase?
DYNAMIC GRID SINGLE CODE ROTATE ORDER
Please use a scale of 1 to 5 where 1 means it would definitely not influence your purchase and 5 means it definitely would influence your purchase.
1. Information about whether or not the fish is endangered or overfished
2. A label that indicates the product is environmentally friendly e.g. Marine Stewardship Council
3. Information about the origin of the fish e.g. location, date of catch
4. Information about how the fish was caught
5. Information on carbon emissions of the fish product

RESPONSE CODES (Sliding scale from 1 to 5)
Don't know

ASK ALL

Q21. Thinking about your food, energy and transport use, which of the following do you currently do?

MULTICODE. ROTATE ORDER

Please select one answer only for each.

1. Compost food and/or green waste, or put food waste out for collection
2. Switch off lights, heating and appliances to save energy
3. Reduce water usage (e.g. taking fewer or shorter showers or fewer baths)
4. Avoid running a vehicle's engine when the vehicle is not moving
5. Walk, or cycle or take public transport instead of driving short distances
6. Burn less/not at all at home (e.g. in stoves, wood burners or open fires)
7. Eat a more plant-based/vegetarian diet

REPONSE CODES.

1. Always
2. Usually
3. Sometimes
4. Never
5. Not applicable (remove for 2, 3 and 7)

Don't know

      Drive a less polluting vehicle (i.e. with lower emissions)
      Generate renewable energy at home e.g. through solar panels
      Use a green energy utilities supplier

REPONSE CODES.

1. Yes
2. No
3. Not applicable (for 1 only)
4. Don't know

ASK ALL

Q22. Within the next 12 months, do you plan on making changes to your lifestyle to protect the marine environment in Northern Ireland?

SINGLE CODE

Please select one answer only

1. I've already made changes but plan to make more
2. I've already made changes and don't plan on doing any more
3. It is very likely
4. It is quite likely
5. I don't think I'll make any changes to my current lifestyle
6. I definitely will not make any changes to my lifestyle.

Don't know

ASK IF Q22 = 5 or 6
Q23. Is this because…?
MULTI CODE. ROTATE ORDER
Please select all that apply.
1. I like my lifestyle and do not want to change
2. I do not know how
3. It is too expensive
4. It is not convenient
5. I already do as much as I can
6. I don't think changes are required
7. I don't think it would have any impact
8. Others aren't making changes so why should I?
9. Other (please specify)

Don't know

ASK IF Q22 = 1,2,3 or 4
Q24. Is this because…?
MULTI CODE. ROTATE ORDER
Please select all that apply.
1. It can help me save money
2. I wish to be greener / do more for the planet
3. I am concerned about the impacts of climate change
4. I am trying to influence other's behaviour
5. I worry about future generations
6. I am influenced by other adults
7. I am influenced by my children
8. I am concerned about the impacts on the marine environment
9. I want to take care and protect the marine environment
10. Other (please specify)

Don't know
The next question is about time you spend at the coast (e.g. beaches, cliffs) and in open sea (e.g. swimming, sailing). By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.
Do include:
- *visits of any duration (including short trips to the beach, dog walking, etc.)*

However, do not include:
- *time outside in the marine environment as part of your job*
- *time spent outside of Northern Ireland*

DO NOT ASK. COMPUTE BASED ON Q26
Q25.

ASK ALL
Q26.   Thinking about the last 12 months, how often on average, if at all, have you spent your leisure time in the following marine environments. This does not include indoor locations and places which you visit as part of your job: *[More than once per day; every day; several times a week; once a week; once or twice a month; once every 2-3 months; once or twice per year; not in the last 12 months; never]*
DYNAMIC GRID SINGLE CODE ROTATE ORDER
Photographs of each habitat to be included.
   1. Sandy beaches
   2. Sand dunes
   3. Shingle/stony beaches
   4. Rocky shores
   5. Coastal cliffs
   6. Salt marshes
   7. Mudflats
   8. Coastal / seaside towns
   9. Open sea
   10. Seagrass meadows
RESPONSE CODES
   1. More than once per day
   2. Every day
   3. Several times a week
   4. Once a week
   5. Once or twice a month
   6. Once every 2-3 months
   7. Once or twice in the last 12 months
   8. Not in the last 12 months
   9. Never
Don't know

ASK IF NOT VISITED ANY IN LAST 12 MONTHS SO CODE 8 OR 9 TO ALL
Q27. What was the main reason/s for not visiting a marine environment in the last 12 months?
MULTICODE
RANDOMISE RESPONSES
Please select all that apply.
1. Bad / poor weather
2. Poor physical health (or illness)
3. Poor mental health or wellbeing
4. Lack of facilities and access points for those with disabilities
5. Too busy at home
6. Too busy at work
7. Not interested
8. Prefer to do other leisure activities
9. Cost / too expensive
10. Fear / worry about crime or anti-social behaviour (including physical and/or verbal abuse)
11. Fear / worry about getting hurt or injured
12. Nowhere near me is nice enough to spend my free time in
13. Stayed at home to stop coronavirus spreading / Government restrictions
14. Poor transport links / access to the coast
15. Lack of parking (or the cost of parking)
16. Takes too long to get there / live too far away

Another reason (please specify)
No particular reason
Don't know

ASK IF Q26 = 1 TO 7 FOR ANY
The following questions ask about your most recent visit to a marine environment
Q28. Thinking about your most recent visit to the marine environment over the last 12 months, how long did you spend there?
SINGLE CODE
Please select one option that best applies.
1. Up to 1 hour
2. Over 1 hour, up to 2 hours
3. Over 2 hours, up to 3 hours
4. Over 3 hours
Don't know

ASK IF Q28 = 4
Q29. Did you stay overnight away from home during this trip?
SINGLE CODE
Please select one option that best applies.
1. Yes
2. No
Don't know

IF Q29 = 1
Q30. How many nights did you stay away from your home during this trip?
Open text box (allow 1-3 digits format check)
Please enter the number of nights
Don't know

Q31. ASK IF Q26 = 1 TO 7 FOR ANY Approximately how far in miles did you travel to get there?
SINGLE CODE
Please select one option that best applies.
 1. Less than 1 mile
 2. 1-2 miles
 3. 3-10 miles
 4. 11-50 miles
 5. More than 50 miles
Don't know

Q32. ASK IF Q26 = 1 TO 7 FOR ANY What was the main form of transport you used to get there?
If you used more than one form of transport to reach your destination please select the one that you used for the longest distance.
SINGLE CODE
 1. Car / van / motorbike
 2. Public transport (e.g. train, bus, coach)
 3. Bicycle / mountain bike
 4. On foot / walking
 5. Mobility aid (such as wheelchair or mobility scooter)
 6. Other (please specify)
Don't know

Q33. ASK IF Q26 = 1 TO 7 FOR ANY Which of the following statements about this time spent at a marine environment are true?
MULTICODE
Please select all that apply.
 1. It was good for my physical health
 2. It was good for the physical health of my family/children
 3. It was good for my mental health
 4. It was good for the mental health of my family/children
 5. It was a good opportunity to spend time with friends or family
 6. My GP prescribed or advised the activity I did on this visit for me
None of the above
Don't know

The following questions concern all visits you may have taken to marine environments over the last 12 months in Northern Ireland.

Q34. ASK IF Q26 = 1 TO 7 FOR ANY What recreational activities did you undertake during your visit(s) to the marine environment in the last 12 months?
MULTICODE. ROTATE ORDER
Please select all that apply.
1. Sailing
2. Rowing/kayaking/canoeing
3. Power boating (outboard/inboard engine)
4. Sea fishing (from shore or boat)
5. Surfing / Body boarding
6. Stand-up paddle boarding
7. Windsurfing / Kite surfing
8. Wreck diving
9. Other Scuba diving
10. Snorkelling
11. Jet skiing
12. Sea swimming
13. Pier diving
14. Walking with a dog
15. Walking without a dog
16. Running
17. Coasteering
18. Sea/coastal bird/wildlife watching
19. Photography / videography at coast / sea
20. Visiting a coastal heritage site (e.g. pier, historic ships, buildings or monuments)
21. Marine themed attraction (e.g. aquarium, zoo, museum)
22. Beach cleaning
23. Beach combing
24. Bait collection
25. Rock pooling
26. Other (please specify)
Don't know

Q35.   ASK IF Q26 = 1 TO 7 FOR ANY Thinking about the last 12 months, do you recall any visits to marine environments being to the following?
MULTICODE. ROTATE ORDER
Please select all that apply.
1.   Coastal Path (e.g. Causeway Coast Way)
2.   Areas of Outstanding Natural Beauty
3.   Site of Special Scientific Interest
4.   National and Local Nature Reserve
5.   Special Area of Conservation
6.   Marine Nature Reserve
7.   National Park
8.   National Marine Park
9.   Heritage Coast
10.   Special Protection Areas for birds
11.   Marine Protected Area / Marine Conservation Zone
12.   Other designated site (please specify)
None of the above
Don't know

Q36.   ASK IF Q26 = 1 TO 7 FOR ANY Thinking more generally about the marine environment, which three statements best describe your motivation to visit? *By the marine environment, we are referring to the wider ocean, seas, coasts, and estuaries and are including all aspects including marine wildlife and plants, marine habitats and ecosystems as well as marine heritage.*

MULTICODE. ROTATE ORDER
Select up to three responses.
1. Visiting the marine environment clears my head.
2. I gain perspective on life during my visits to the marine environment.
3. Visiting the marine environment makes me feel more connected to nature/heritage.
4. At the marine environment I feel part of something that is greater than myself.
5. The marine environment feels almost like a part of me.
6. I feel a sense of belonging in the marine environment.
7. I've had a lot of memorable experiences in the marine environment.
8. I miss the marine environment when I have been away from it for a long time.
9. Visiting the marine environment has made me learn more about nature/heritage.
10. I have made or strengthened bonds with others through visiting the marine environment.
11. I feel like I can contribute to taking care of the marine environment.
12. I have felt touched by the beauty of the marine environment.
13. The marine environment inspires me.
14. Visiting the marine environment leaves me feeling more healthy.
15. Visiting the marine environment gives me a sense of freedom.
16. Other (please specify)
17. Don't know

SECTION 4: MARINE ENVIRONMENT HABITATS
The following series of questions focus in greater detail on marine habitats and the potential benefits they can provide.
ASK ALL
NQ5. The following are a range of POTENTIAL BENEFITS of salt marshes and seagrass meadows. We would like you to think about how important each of these benefits are in comparison to each other. In your opinion for each habitat, which three do you think are the most important?
DYNAMIC GRID. MULTICODE. ROTATE ORDER
1. Salt marshes
2. Seagrass meadows

RESPONSE CODES
Please select up to three.
1. Carbon capture and storage
2. Recreation
3. Mental health and wellbeing support
4. Diverse habitats for wildlife
5. Natural forms of coastal protection
6. Food e.g. fisheries
7. Pollution control and water purification
Don't know

NQ6. Below is a description of a range of natural habitats. Thinking about carbon capture and storage, in your opinion which three habitats are the most important? MULTI CODE. ROTATE ORDER.
Please select up to three.

1. Boreal forest		Coniferous forests of pine, spruce and larch trees. Also known as snow forests or taiga.
2. Mangroves		Salt-tolerant trees and shrubs that live along rivers, shores and estuaries.
3. Tropical rainforest		Forests that are found in the tropics in areas of high rainfall around the equator.
4. Peatland		Wetland ecosystems, sometimes known as bogs, fens, and mires, found inland.
5. Salt marsh		Salt-tolerant plants such as herbs, grasses, or low shrubs found between land and sea. .

6. Temperate forest		A mix of deciduous, broadleaved and evergreen trees found in temperate regions.
7. Grassland		Large, open areas where the vegetation is mostly dominated by grass. Also known as savanna, prairies, steppes or pampas.
8. Seagrass		The only flowering plants able to live fully submerged in sea water. Found between land and sea, and under the sea.

Don't know

ASK ALL
NQ7. Which of the following habitats do you believe are found in [the U.K.]?
    MULTICODE. ROTATE ORDER.
    Please select all that apply.

1. Boreal forest
2. Mangroves
3. Tropical rainforest
4. Peatland
5. Salt marsh
6. Temperate forest
7. Grassland
8. Seagrass

None of the above
Don't Know

ASK ALL
NQ8. Are you aware of any efforts to restore the following coastal habitats?
DYNAMIC GRID. SINGLE CODE. ROTATE ORDER.
1. Salt marshes
2. Seagrass meadows

RESPONSE CODES
1. Yes
2. No
3. Don't know

ASK IF NQ8 RESPONSE = 1
NQ9. Where have you seen efforts to restore [salt marsh or seagrass]? Provide examples.
Open text (Limit of 100 words)
ASK ALL
NQ10. The following are a range of REASONS FOR RESTORING salt marshes and seagrass meadows. In your opinion for each habitat, which three do you think are the most important reasons to restore these habitats?
DYNAMIC GRID. MULTICODE. ROTATE ORDER
1. Salt marshes
2. Seagrass meadows
RESPONSE CODES
Please select up to three.
1. Carbon capture and storage
2. Recreation
3. Mental health and wellbeing support
4. Diverse habitats for wildlife
5. Natural forms of coastal protection
6. Food e.g. fisheries
7. Pollution control and water purification

ASK ALL

NQ11.The following are statements about salt marshes. For each habitat, please indicate to what extent you agree with each statement.

DYNAMIC GRID. SINGLE CODE. ROTATE STATEMENTS.

1. Salt marshes are an underappreciated/ undervalued habitat
2. Salt marshes are of little benefit to people.
3. Salt marshes in the UK are effectively managed.
4. Salt marshes are classified as a priority habitat under the UK Biodiversity Action Plan.
5. A healthy salt marsh will provide more benefits to people than a damaged salt marsh.
6. Salt marshes protect coastlines from sea-level rise and storms.
7. Salt marshes play no real role in carbon capture and storage.
8. Salt marsh is the least interesting marine habitat.
9. Salt marshes are muddy, dirty environments.
10. Salt marsh habitat disrupts and makes the beach less inviting.

RESPONSE CODES.

Please select one answer only.

6. Strongly agree
7. Agree
8. Neither agree nor disagree
9. Disagree
10. Strongly disagree

Don't Know

ASK ALL

NQ12.The following are statements about seagrass meadows. For each habitat, please indicate to what extent you agree with each statement.

DYNAMIC GRID. SINGLE CODE. ROTATE STATEMENTS.

1. Seagrass is an underappreciated/ undervalued habitat.
2. Seagrass habitat is of little benefit to people.
3. Seagrass habitats in the UK are effectively managed.
4. Seagrass is classified as a priority habitat under the UK Biodiversity Action Plan.
5. A healthy seagrass habitat will provide more benefits to people than a damaged seagrass habitat.
6. Seagrass protects coastlines from sea-level rise and storms.
7. Seagrass plays no real role in carbon capture and storage.
8. Seagrass is the least interesting marine habitat.
9. Seagrass washed up on the beach is unattractive and smells bad.
10. It is less attractive to swim in areas where seagrass grow.
11. Seagrass washed up on the beach is unattractive and smells bad.

Please select one answer only.

11. Strongly agree
12. Agree
13. Neither agree nor disagree
14. Disagree
15. Strongly disagree

Don't Know

SECTION 5: ABOUT YOU

This data will help us to understand diverse views and experiences with the marine environment in Northern Ireland. It will give us valuable insight into how we can work to improve access and raise awareness of issues. You may find some of the questions sensitive, in which case you are free not to answer them. All information collected through this survey will be held securely and treated in the strictest confidence. No identifiable information will be shared with Daera or anyone else. Results will be reported at an overall level so individual responses will not be identifiable.

ASK ALL
D2.   What is your sex?
SINGLE CODE
Please select one answer only
Note: A question about gender will follow
1. Male
2. Female
3. Other (please specify)

Prefer not to say

ASK ALL
D3.   Is the gender you identify with the same as your sex registered at birth?
SINGLE CODE
Please select one answer only
Note: This question is optional
1. Yes
2. No

Prefer not to say

ASK ALL
D4.   Which one of the following best describes your ethnic group or background?
SINGLE CODE
Please select one answer only
White
1. Northern Irish/English/Welsh/Scottish/British
2. Irish
3. Member of the Traveller Community
4. Any other White background, please describe
Mixed/Multiple ethnic groups
5. White and Black Caribbean
6. White and Black African
7. White and Asian
8. Any other Mixed/Multiple ethnic backgrounds, please describe
Asian/Asian British
9. Indian
10. Pakistani
11. Bangladeshi
12. Chinese
13. Any other Asian background, please describe
Black / African / Caribbean / Black British
14. African
15. Caribbean

16. Any other Black/African/Caribbean background, please describe
Other ethnic group
17. Arab
18. Any other ethnic group, please describe

Prefer not to say
D5.   Which of the following best describes your religion?
SINGLE CODE
Please select one answer only
1. No religion
2. Catholic
3. Protestant
4. Buddhist
5. Hindu
6. Jewish
7. Muslim
8. Sikh
9. Any other religion, please describe
10. Prefer not to say

ASK ALL
D6.   Which of the following best describes your total annual household income before tax?
SINGLE CODE
Please select one answer only
1. £0–15,000
2. £15,001–20,000
3. £20,001–30,000
4. £30,001–40,000
5. £40,001–50,000
6. £50,001–60,000
7. £60,001–80,000
8. £80,001–100,000
9. £100,001-£150,000
10. £150,001+
Prefer not to say

ASK ALL
D7.   What is your highest level of qualification?
SINGLE CODE
Please select one answer only
1. PHD/Doctor
2. Masters
3. Bachelor's Degree or equivalent (such as a NVQ level 5)
4. Higher education (such as a HND or a NVQ level 4)
5. A level or equivalent (such as a Welsh Baccalaureate, Scottish Highers, NVQ level 3, BTEC National)
6. GCSE or equivalent (such as O Level, NVQ level 2, BTEC First or an RSA Diploma)
7. No qualifications
8. Other qualifications (please specify)

Prefer not to say

ASK ALL
D8.   Are you?
SINGLE CODE
Please select one option that best applies.
1. In full-time employment (31+ hours per week)
2. In part-time employment (Up to 30 hours per week)
3. Self-employed
4. Unemployed – less than 12 months
5. Unemployed (long term) – more than 12 months
6. Not working – retired
7. Not working – looking after house/children/other caring responsibilities
8. Not working – long term sick or disabled
9. Student – in full-time education
10. Student – in part-time education
11. Prefer not to say

ASK ALL

D9. **Are you or any of your immediate family employed in one of the following industries in Northern Ireland?**

MULTICODE

Please select all that apply

1. Fishing and aquaculture (including processing etc.)
2. Oil & gas
3. Offshore wind or renewable energy
4. Ports and shipping
5. Marine recreation and tourism e.g. scuba diving, cruise tourism, recreational boating
6. Marine conservation
7. Marine research
8. Extraction of marine aggregates
9. Sub-marine cabling and other infrastructure
10. Marine policy making
11. Marine planning
12. Marine management
13. Royal Navy / Royal Marines
14. Merchant Navy
15. Maritime heritage
16. No
17. Prefer not to say

ASK ALL

D10. **Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?**

SINGLE CODE

Please select one answer only.

1. Yes
2. No
3. Prefer not to say

ASK IF D10 = Yes

D11. **Does your condition or illness reduce your ability to carry-out day-to-day activities?**

SINGLE CODE

Please select one answer only.

1. Yes, a lot
2. Yes, a little
3. Not at all
4. Prefer not to say
5. Prefer not to say

ASK ALL
D12.   Would you say that, in general, your health is…?
SINGLE CODE
Please select one answer only.
1. Very good
2. Good
3. Fair
4. Bad
5. Very bad
6. Prefer not to say

Finally, we would like to ask you four questions about your feelings on aspects of your life. There are no right or wrong answers – for each question please answer using the scale provided of 0 to 10, where 0 is 'not at all' and 10 is 'completely'.

ASK ALL
D13.   Overall, how satisfied are you with your life nowadays?
SINGLE CODE
Please select one answer only.
0 – Not at all
1
2
3
4
5
6
7
8
9
10 – Completely
11 Prefer not to say

ASK ALL
D14.   Overall, how worthwhile are the things you do in your life?
SINGLE CODE
Please select one answer only.
0 – Not at all
1
2
3
4
5
6
7
8
9
10 – Completely
11 Prefer not to say

ASK ALL
D15.   How happy were you feeling yesterday?
SINGLE CODE
Please select one answer only.
0 – Not at all
1
2
3
4
5
6
7
8
9
10 – Completely
11 Prefer not to say

ASK ALL
D16.   How anxious were you feeling yesterday?
SINGLE CODE
Please select one answer only.
0 – Not at all
1
2
3
4
5
6
7
8
9
10 – Completely
11 Prefer not to say

That was the final question. Thank you very much for taking the time to complete our survey. Do you have any other comments you would like to feedback to Daera about marine environments?
INSERT OPEN TEXT BOX

Please click on the next button to submit your responses.
For more information about Daera's work within the marine environment; please visit:
https://www.daera-ni.gov.uk/topics/marine

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