

Coastwise Survey (2024) - Analysis

Final Report

Prepared by RPA for North Norfolk District Council

8 November 2024







Coastwise Survey Analysis

Final Report

prepared for

North Norfolk District Council

8 November 2024



Report	Version	Description including reason for changes	Date
Draft final	1.0	For submission to client	11/10/24
Final	2.0	Addressing comments	8/11/24

Quality Assurance	
Project reference / title	J1283 Coastwise Survey Analysis
Report status	Final Report
Author(s)	Daisy Copping Sam Webb Henrietta Standing Liam Wakefield
Approved for issue by	Teresa Fenn
Date of issue	8/11/24





Coastal transition accelerator programme

Part of the £200m Flood and coastal innovation programmes

Disclaimer

The views and propositions expressed herein are, unless otherwise stated, those of Risk & Policy Analysts and do not necessarily represent any official view of 'North Norfolk District Council' or any other organisation mentioned in this report.

Recommended citation: RPA (2024): Coastwise Survey Analysis, Final Report for North Norfolk District Council, November 2024, Norwich, Norfolk, UK



Executive Summary

This project looked at survey data collected by the Coastwise project to better understand the public's relationship with the coast and assess levels of awareness, knowledge, and concern regarding coastal erosion. In doing so, this project seeks to fill critical gaps in existing data about local experiences of coastal erosion and help inform consultation and engagement with local communities facing coastal erosion. Among the respondents, there was a clear and significant value placed on coastal landscapes. Feedback was overwhelmingly positive regarding the value of the North Norfolk coast with respondents highlighting the aesthetic appeal and geographical diversity of the area. The tranquillity and unspoilt nature of the coast was repeatedly mentioned and considered a huge benefit for mental health and wellbeing. Continued access to beaches and the area were important for physical activity and tourism. The word cloud presented an overview of what respondents value on the North Norfolk coast.

Coastal erosion remained the top priority for respondents, with 79% placing it in their top 3 priorities. Regardless age gender or location, it remains a top priority and does so by a large margin. It was perceived as the most critical issue for North Norfolk coastal communities, which is unsurprising given the subject of this survey. The natural environment and affordable housing were the next two most important priorities. A strong awareness of coastal erosion was reported, likely driven by the visible impact and personal experiences of erosion, with 90% of respondents reported that they were "very aware" or "aware" of it. While many respondents recognised the issue of coastal erosion, fewer reported having in-depth knowledge of the processes behind coastal erosion, such as why and how it occurs. The responses suggest that respondents have limited coastal erosion literacy with a lack of awareness around the fact that coastal change is a natural process which has been the case throughout history. However, their concerns highlight how there is a need for greater understanding of coastal erosion as well as the options available for slowing down the rate of erosion which is increasing due to climate change. Those with higher knowledge tended to rely on academic or professional sources whilst those with lower knowledge drew their information from media coverage and personal experiences.

Across the survey, respondents expressed a strong concern about coastal erosion, with 53% reporting that they were "very concerned". Respondents conveyed feelings of abandonment, suggesting a lack of sufficient support or action to address the issue throughout the survey. Although a minority of respondents viewed coastal erosion as a natural and inevitable process, the predominant theme was the need to prioritise people and communities when addressing this challenge. Respondents also shared personal stories about how coastal erosion had affected them, through property damage and the economic consequences (24%). The emotional and psychological toll was also significant, as many recounted feelings of stress, anxiety, and worry resulting from the changing landscape (9%).

There was a strong belief that government groups bear significant responsibility for preparing for coastal erosion, with less responsibility attributed to local stakeholders such as residents and businesses. Results suggested a broad consensus around who should bear responsibility, however, a small minority expressed the view that it is a collective effort in preparing for coastal erosion. 60% of respondents believe that preparation for coastal erosion is not given enough prioritisation. Respondents reported challenges in accessing information on coastal erosion and its impacts, however there is evidence of desire to understand more about how erosion might affect them personally and in the future. There was evidence that respondents want to get involved in coastal erosion preparedness with their efforts "[making] a difference" being the biggest motivator (53%).

Table of Contents

Exe	cutive Su	ummaryi
Glos	ssary	iii
1	Introdu	uction4
2	Approa	nch and methodology5
2.1	Data cle	eaning and initial review5
2.2	Worksh	nop6
2.3	Analysi	s6
3	Researc	ch findings9
3.1	•	dent profile9
3.2	Unders	tanding the relationship to the coast20
3.3	Unders	tanding awareness, knowledge and concerns of coastal erosion27
3.4	Plannin	ng ahead and preparing for coastal erosion66
4	Limitat	ions80
4.1	Questic	on 19 Wellbeing80
4.2	Baselin	ing81
4.3	Respon	dent bias81
5	Recom	mendations83
5.1	Recomi	mendations for future work83
5.2	Recomi	mendations for survey design84
6	Conclus	sions86
Ann	iex 1	Traceability document87
Ann	ex 2	Coding library90
Ann	ex 3	Coastwise Survey91

Glossary

Al	Artificial Intelligence
CERZ	Coastal Erosion Risk Zone
GP	General Practitioner
NHS	National Health Service
NN	North Norfolk
ONS4	Office for National Statistics Personal Wellbeing Survey User Guidance
SSSI	Site of Special Scientific Interest
UK	United Kingdom

1 Introduction

Coastwise is an initiative led by North Norfolk District Council to help prepare coastal communities where the coast is eroding between Weybourne and Happisburgh in North Norfolk. Between March and April 2024, a 33-question online survey was deployed and received over 900 responses. This report offers an in-depth analysis of the survey data, exploring both qualitative insights and quantitative trends.

The primary aim of this Coastwise project is to better understand the public's relationship with the coast and assess levels of awareness, knowledge, and concern regarding coastal erosion. In doing so, the project seeks to fill critical gaps in existing data about local experiences of coastal erosion. The information gathered will be used in informing future planning and preparation strategies for coastal management.

Importantly, the outputs and deliverables of the project have been tailored for specific audiences, ensuring that the findings are relevant and actionable. A central objective of the project is to establish a baseline understanding of how coastal erosion affects communities, businesses, and stakeholders. This data can support government authorities and agencies by providing robust evidence to strengthen business cases and secure funding for coastal management initiatives.

This report provides a deep dive analysis of the data and looks at both the qualitative and quantitative content provided in the survey. The project aims to understand people's relationship to the coast, understand levels of awareness, knowledge and concern around coastal erosion, and help gather information to plan ahead and prepare for coastal erosion.

In addition to data analysis, this report can serve as a foundation for stakeholder engagement, particularly with the coastal communities of North Norfolk. It highlights location-specific findings and provides valuable insights to guide future outreach and engagement activities, ensuring that Coastwise's efforts remain relevant and community-focused. These findings can also inform Coastwise's ongoing outreach programs, such as Coastwise cafés, and other local initiatives.

Finally, the report offers recommendations for future surveys and potential areas of focus for the Coastwise team. The baseline data presented here will serve as a valuable benchmark, allowing for comparison with further work scheduled for completion by the project's end in 2027. The structure of the report is as follows:

- Section 2 presents the approach and methodology;
- Section 3 includes the main analysis and findings;
- Section 4 provides the limitations of the analysis;
- Section 5 provides recommendations for future work and survey design; and
- Section 6 provides conclusions.

The annexes that accompany this report also include:

- Annex 1 presents the traceability document;
- Annex 2 presents the coding library; and
- Annex 3 presents the Coastwise survey.

2 Approach and methodology

2.1 Data cleaning and initial review

After the study team received the data, multiple rounds of data cleaning were undertaken. This included preparing the data so that it was in a format that could be easily analysed. This also involved:

- Checking for blank, duplicate and spurious responses. The closed questions were assessed and reallocated based on the clarification provided in the open text response;
- Identifying problematic data where respondents may have misinterpreted the question;
- Refining data types to match Excel's formatting needs;
- Collating data into single variables where needed; and
- Compiling multiple-choice questions.

An overview of how the data has been changed or edited from the original dataset that was provided to the study team is included in Annex 1.

Coastwise also provided the study team with the NODA Coastwise survey notes which looks at observations and potential lines of further enquiry. They also provided an Excel spreadsheet titled "Coastwise Question Overview" which provided information on why questions were included in the survey and potential analysis that could be undertaken. The study team used this to generate ideas on how the questions could be cross-referenced to identify which relationships to prioritise. These prioritisations were presented this in the workshop.

A 'survey campaign' is defined as a collective of respondents intending to influence findings through coordinating and submitting identikit responses. Subsequently it is important for the study team to identify and extract campaign responses to prevent the effect of campaign bias. This is done through statistical assessment of text similarity (Jaccard coefficient¹) in responses against closed questions, and respondent metadata (i.e. name, location, stakeholder type, email domain). The study team defines a campaign as a group of respondents with the power to influence results as ≥ 5% of all responses (for this survey the campaign threshold is set at 48, based on 957 responses). However, due to the fact that open text questions used in the questionnaire rarely received in depth/substantive replies it was not possible to perform a statistical campaign analysis. Instead, the study team manually assessed all open text replies for identikit responses and compared against respondent metadata. The assessment did not identify any campaigns that reached the threshold, and subsequently all responses were kept in the analysis.

To note, the workshop (see section 2.2) discussed the prominence of responses from Happisburgh (see section 3.1) which may have resulted in an overrepresentation of this location's feedback. This may be due to respondents sharing the link on social media and in resident group chats which enabled the survey to get considerable traction. The study team assessed the distribution of responses by location against Office for National Statistics (ONS) population statistics to determine whether or not the responses were overrepresented (see section 3.1.1). The comparison found there is a higher proportion of responses from Happisburgh than the census data and suggests the results are somewhat skewed toward this location. To check the influence of this, the study team have reviewed relevant questions by all locations to ensure key findings for other locations are accounted for. More detail on the respondent profile and the number of respondents from each demographic group is

-

¹ The Jaccard coefficient is a statistic that is used for checking the similarity of text data. The coefficient ranges from 0 (which indicates that the sets have no elements in common) to 1 (which indicates that the sets are identical).

presented in section 3.1 where the representativeness of different demographic is also considered. These responses have been retained because they offer valuable insights into local experiences of coastal erosion, which are crucial for understanding its impact on the affected communities. Furthermore, since the dataset allows responses to be traced back to specific locations, Coastwise has the option to adjust for any potential overrepresentation in future analyses, should they wish to minimise the influence of this group.

2.2 Workshop

A hybrid workshop was held on the 4th September 2024 with the study team and the Coastwise team. The aim of the workshop was to review the data obtained by the Coastwise survey and determine the key analysis to take forward. The workshop was interactive, with a PowerPoint presentation providing the starting point for discussion. The aim was to have an interactive session which would enable the Coastwise team to shape the project's direction and define the deliverables.

During the workshop, we stepped through the survey questions one by one and discussed the priority analysis and how different questions could be cross-referenced with another. Data related challenges that were encountered by the study team during the data cleaning and initial review of the data were also discussed and approaches were agreed.

Following the workshop, a workshop outcomes document was shared with the Coastwise team confirming the approach and decisions made in the meeting.

2.3 Analysis

2.3.1 Quantitative analysis

Following the workshop, the study team finalised a list of cross-references to be applied to each survey question. Cross-references identified specific variables suitable for filtering each question, as well as other survey questions suitable for cross-tabulation. This method allowed the study team to drill deeper into the relationships between a survey question, its specific answer options, other relevant survey questions and other specific variables (e.g. age groups, specific locations). To note, this method only pulls out results where respondents have provided data for both questions/variables being examined.

The study team has applied simple descriptive statistics to explore and visualise responses to the survey. The majority of questions used in the survey retrieved categorical or ordinal data and therefore the best form of analysis and visualisation was through the use of bar charts.

The analysis was systematically performed with the use of Microsoft Excel for ease of accessibility. Each question has its own dedicated worksheet, with a clear directory to easily navigate to the corresponding data. The spreadsheet is designed as a dashboard to Coastwise and other analysts to easily navigate the results.

While this report presents the headline figures, the full range of filters and cross-references agreed upon during the workshop are accessible through the dashboard, allowing for deeper analysis of each question as needed. Not all charts and graphs are presented in this report, but they can all be found in the Excel dashboard. A separate Excel file will also be shared with the Coastwise team including the cleaned dataset along with the coding of responses to open text questions in a simple format to support any future analysis that the Coastwise team may want to do.

2.3.2 Qualitative analysis

The survey incorporated a range of open text questions to complement the closed-question format, offering respondents the opportunity to provide additional insights. This included spaces for 'other' responses to multiple-choice questions, as well as areas where participants could expand on their answers in more detail.

Responses categorised as 'other' were reviewed and, if sufficient numbers justified it, additional categories were created. Open text responses were analysed using thematic analysis, a method that systematically identifies patterns and themes within qualitative data. Further details on the coding process are outlined below. This thematic coding was used to enrich the overall analysis, and where relevant, direct quotes and summarised themes are included throughout the report to offer deeper context and clarity. Tables are also included in some sections to provide an overview of how many respondents reported certain themes, these show the percentage and the count that reported these themes².

Coding

The survey included a range of open text questions. These required coding in order to sort the responses into themes. Three types of coding were undertaken:

- Pre-defined codes;
- Theme codes; and
- Thematic analysis

Pre-defined codes were codes which were based on the multiple-choice answer options featured in the question itself. Examples of this include Question 10³ and Question 20⁴. These were coded based on themes mentioned where respondents expanded on their responses. Where responses did not fit into categories that were pre-defined they were labelled as 'other'.

Other questions in the survey were designed as open text responses, allowing respondents to provide answers in their own words. These responses were categorised into thematic codes. For example, this process was applied to questions like Question 2⁵ and Question 17⁶. Open text data provided by respondents were processed with the use of generative AI to identify and define recurring topics into a coding framework. This framework formed the basis of all open text analysis in which the study team assigned relevant codes to summarise the response. Recurring topics were manually assessed for similarity and grouped into themes where suitable. Generative AI was not used to code or analyse open text data due to its lack of accuracy, rather it was only used to establish the coding framework, the suitability of which was agreed with Coastwise before further analysis was conducted. The study team manually investigated the accuracy of the coding framework against a random sample of open text responses. Following this, coding of each response against the coding framework was performed

Tables are not included in every section of the report. In some cases the response rate was poor and the quality of responses did not justify inclusion so these are discussed in the body of the text.

What do you think are the top three priorities for North Norfolk coastal communities between Weybourne and Happisburgh in the next 5 years? The options are listed in alphabetical order.

⁴ Which of the following do you associate with coastal erosion in North Norfolk? Tick as many as you wish.

What do you value most about the North Norfolk coast? This can be in general or relate to particular special places.

Have you, or someone you know, been affected by erosion, and how? Tick all that apply. If possible, please give us some examples of how you, others or your community are affected.

manually, again ensuring relevance of the coding framework. Please note that sensitive respondent information was not uploaded to the AI tool.

In some questions where the response rate was lower, or the responses were simpler the study team undertook thematic coding. The team took a manual systematic approach identifying and labelling recurring themes in the data.

If gaps were identified or if a relevant theme was missing, the study team manually included it in the coding framework. Descriptions for each theme were created and refined to address any overlaps or clarity issues. The study team subsequently applied this coding framework to the survey responses systematically labelling each response according to the identified themes manually. The coding library can be found in Annex 2.

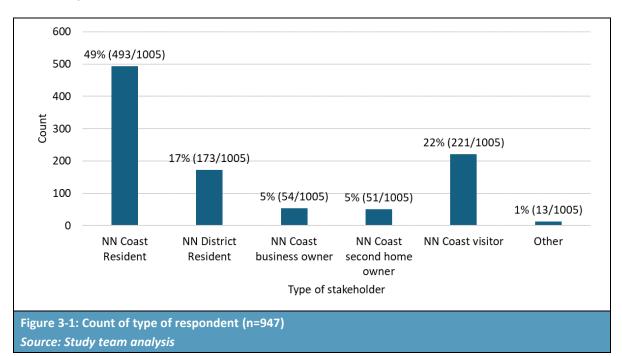
3 Research findings

3.1 Respondent profile

This section presents simple descriptive statistics of the demographic information provided in the survey and provides an overview of the respondent profile. This sets out an overview of the type of respondents that were answering the survey. Many of these indicators are used as filters in the analysis.

Type of respondent

Figure 3-1 presents the count of type of respondent. Note that this does not sum to the total number of respondents answering this question (947). This question was designed as a multiple-choice question and respondents could select multiple stakeholder types, so the count is not representative of the total number of respondents⁷; a total of 1005 responses were provided by 957 respondents. The majority of responses were from North Norfolk (NN) coast residents (49%, 493 out of 1005) followed by NN coast visitor (22%, 221 out of 1005).

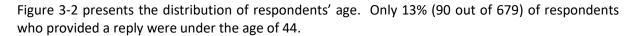


An additional binary variable was created to make the data easier to analyse and remove problems with it originally being a multiple-choice filter. NN coast resident and NN coast business owner were combined to create the variable – NN coast stakeholder. This variable is used as a filter in the analysis of specific survey questions throughout the report. Due to the structure of the survey it was not possible to distinguish if respondents were providing their response from which perspective if they had selected multiple responses, i.e. NN coast resident and NN business owner. Splitting the data by each individual response would have led to double counting and inconsistencies when comparing results with other multiple-choice questions.

_

⁷ As respondents could select multiple stakeholder types there will be some double counting in this data. The counts recorded in Figure 3-1 provide an overview of proportion of different stakeholders participating in the survey.

Age



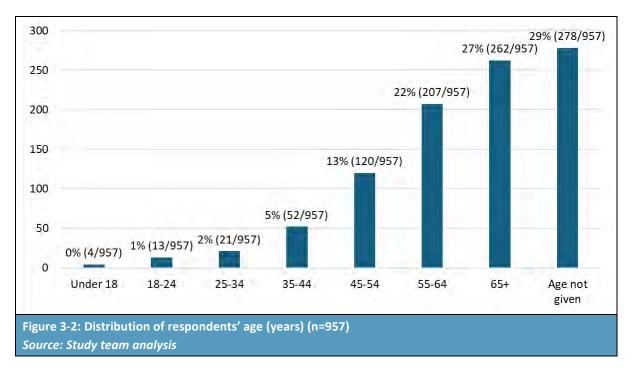


Table 3-1 presents an overview of the splits between ages in North Norfolk. In some cases, this is difficult to compare as there are different age brackets used, however some comparisons can be made. The highest proportion of respondents were from the 55-64 and 65+ age category and this is in line with the distribution patterns in the Census data. According to the Census data those that are 65+ make up 33.5% of the population. In the survey 65+ respondents represented 38.5% of those that answered. There is some evidence of overrepresentation but not by a huge margin.

The survey results do align with demographic statistics in the North Norfolk area at an aggregated level. However, there may be an issue with lack of representativeness for under 35-year-olds as there were only 38 respondents (4%) for this group. This should be considered when reading the results and in some cases the results when split by age do show differences, but the sample size is too small to produce reliable results.

Table 3-1: Census age in Nort	h Norfolk	
Age brackets	Count	Percentages
All usual residents	102,980	100.0
Aged 4 years and under	3,664	3.6
Aged 5 to 9 years	4,423	4.3
Aged 10 to 15 years	5,748	5.6
Aged 16 to 19 years	3,474	3.4
Aged 20 to 24 years	3,882	3.8
Aged 25 to 34 years	8,936	8.7
Aged 35 to 49 years	14,611	14.2
Aged 50 to 64 years	23,742	23.1
Aged 65 to 74 years	17,794	17.3
Aged 75 to 84 years	11,781	11.4
Aged 85 years and over	4,925	4.8

Source: ONS (2021) 2021 Census Profile for areas in England and Wales. Available at:

https://www.nomisweb.co.uk/sources/census 2021/report?compare=E07000147. Accessed October 2024.

Gender

Figure 3-3 presents a distribution of respondents' gender. The majority of respondents were female (42%, 399 out of 957), however a large percentage of respondents left this question blank (29%, 281 out of 957). This question was near the end of the survey so this could be a result of consultation fatigue.

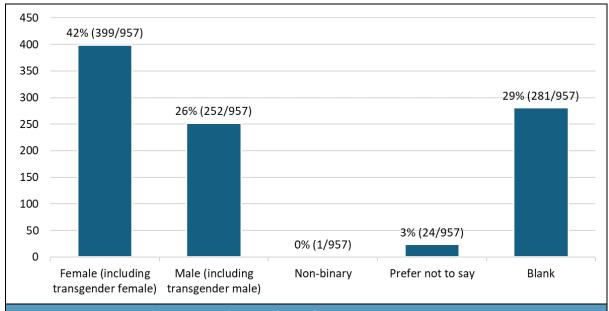


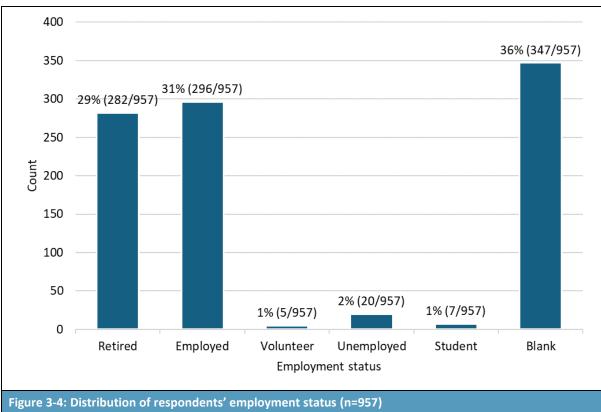
Figure 3-3: Distribution of respondents' gender (n=957)

Source: Study team analysis

Employment status

Figure 3-4 presents a distribution of respondents' employment status. This was an open text question, and the results have been coded and sorted into the categories below. More information on how this was completed can be found in Annex 1 in the traceability document. There were a high number of blanks in this question (36%, 347 out of 957) however this question was near the very end of the survey so there may be some evidence of consultation fatigue here. Of those that gave a response the

majority were retired (29%, 282 out of 957) and employed (31%, 296 out of 957). Compared to Census 2021 data⁸ in the North Norfolk authority 46% of residents were economically active and 37.3% were retired which may suggest that the data is representative of the local population.



Source: Study team analysis

3.1.1 Residents

Location

Figure 3-5 shows the distribution of respondents by location⁹, with the majority coming from Happisburgh—a community heavily impacted by erosion. This high response rate is understandable, given the area's significant challenges. In the workshop it was also raised that a stakeholder in Happisburgh shared the survey, and it was able to get considerable traction. Cromer and Sheringham also had substantial representation among respondents.

ONS 2021 Profile (2021)Census for areas England Wales. Available https://www.nomisweb.co.uk/sources/census 2021/report?compare=E07000147. Accessed October 2024.

⁹ 'Other' locations included: Fakenham, Horstead, Sea Palling, Caister on Sea, Waxham, Wells Next the Sea, Trunch, Beeston Regis, Holt, Eccles on Sea, North Walsham, Southrepps, Hemsby, Southend on Sea,

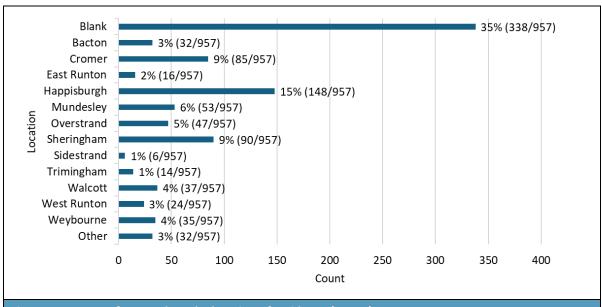


Figure 3-5: Count of respondents by location of residence (n=957) Source: Study team analysis

This was then compared to the Parish population estimates for mid-2001 to mid-2019 from Census data, presented in Table 3-2. There is a bias towards Happisburgh in terms of representation as a much higher proportion of respondents were located in this area compared to the estimates in the Census data, 25% compared with 4%. This indicates that there is a strong influence from Happisburgh in the results and this should be noted when reading through the analysis. Cromer and Sheringham were the highest reported areas in the Census data and also had a high proportion of responses in the survey.

Table 3-2: Parish p	opulation estimates in	North Norfolk		
	Census		Survey data	
Location	Count	Percentages	Count	Percentages
Bacton	1249	5%	32	5%
Cromer	7738	33%	85	14%
East Runton	628	3%	16	3%
Happisburgh	875	4%	148	25%
Mundesley	2727	12%	53	9%
Overstrand	980	4%	47	8%
Sidestrand	213	1%	6	1%
Sheringham	7365	32%	90	15%
Trimingham	459	2%	14	2%
Walcott	546	2%	37	6%
West Runton	No d	ata	24	4%
Weybourne	513	2%	35	6%

Source: ONS (2020) Parish population estimates for mid-2001 to mid-2019 based on best-fitting of output areas to parishes. Available at:

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/adhocs/12324parishpopulationestimatesformid2001tomid2019basedonbestfittingofoutputareastoparishes Accessed October 2024.

Note: the percentages in this table are different to Figure 3-5 as blanks have been removed from the calculation.

Length of residence

The length of residence by location is reported in Figure 3-6. The majority of respondents have lived in their area for over 20 years (33%, 202 out of 619). This question is used as a filter to see if this has an impact on people's relationship with the coast and their understanding of coastal erosion.

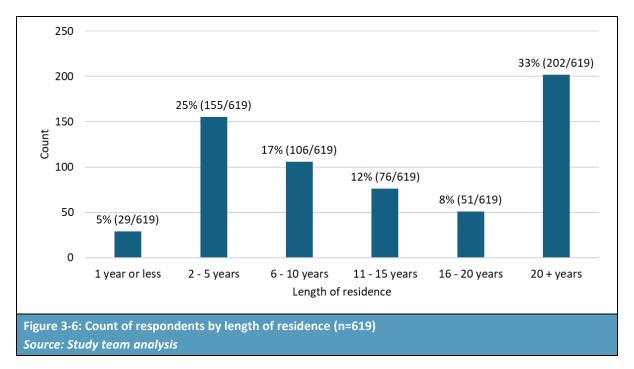


Figure 3-7 presents the length of residence split by location, the numbers that correspond to this are presented in Table 3-3. There were no specific differences identified between locations. There was no evidence where living in a certain location resulted in living there for a long period of time. This is also difficult to compare+- between locations as splitting between sub-groups results in very small sample sizes for some locations.

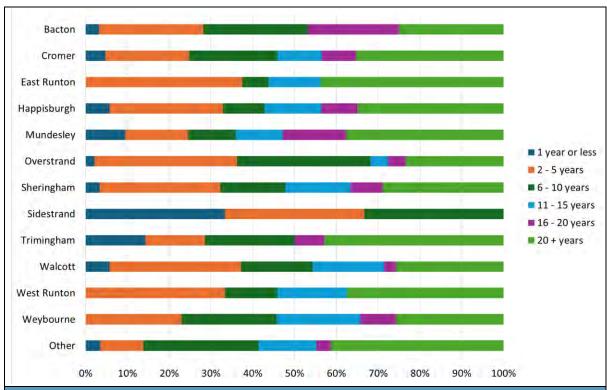


Figure 3-7: Location by length of residence (n=606) Source: Study team analysis

Table 3-3: Loca	ntion by length of I	residence (n = 606	5)			
Locations	1 year or less	2 - 5 years	6 - 10 years	11 - 15 years	16 - 20 years	20 + years
Bacton	3% (1/32)	25% (8/32)	25% (8/32)		22% (7/32)	25% (8/32)
Cromer	5% (4/85)	20% (17/85)	21% (18/85)	11% (9/85)	8% (7/85)	35% (30/85)
East Runton		38% (6/16)	6% (1/16)	13% (2/16)		44% (7/16)
Happisburgh	6% (8/140)	27% (38/140)	10% (14/140)	14% (19/140)	9% (12/140)	35% (49/140)
Mundesley	9% (5/53)	15% (8/53)	11% (6/53)	11% (6/53)	15% (8/53)	38% (20/53)
Overstrand	2% (1/47)	34% (16/47)	32% (15/47)	4% (2/47)	4% (2/47)	23% (11/47)
Sheringham	3% (3/90)	29% (26/90)	16% (14/90)	16% (14/90)	8% (7/90)	29% (26/90)
Sidestrand	33% (2/6)	33% (2/6)	33% (2/6)			
Trimingham	14% (2/14)	14% (2/14)	21% (3/14)		7% (1/14)	43% (6/14)
Walcott	6% (2/35)	31% (11/35)	17% (6/35)	17% (6/35)	3% (1/35)	26% (9/35)
West Runton		33% (8/24)	13% (3/24)	17% (4/24)		38% (9/24)
Weybourne		23% (8/35)	23% (8/35)	20% (7/35)	9% (3/35)	26% (9/35)
Other	3% (1/29)	10% (3/29)	28% (8/29)	14% (4/29)	3% (1/29)	41% (12/29)
Grand Total	5% (29/606)	25% (153/606)	17% (106/606)	12% (73/606)	8% (49/606)	32% (196/606)
Source: Study to	eam analysis					

Live in CERZ

Figure 3-8 presents the percentage of respondents living in the Coastal Erosion Risk Zone (CERZ). A large percentage of respondents (32%, 309 out of 957) did not answer this question which may indicate that this question was not relevant to them as they might not be a stakeholder on the NN coast. Around 18% of respondents (173 out of 957) answered 'I don't know' to this question which may indicate a potential knowledge gap.

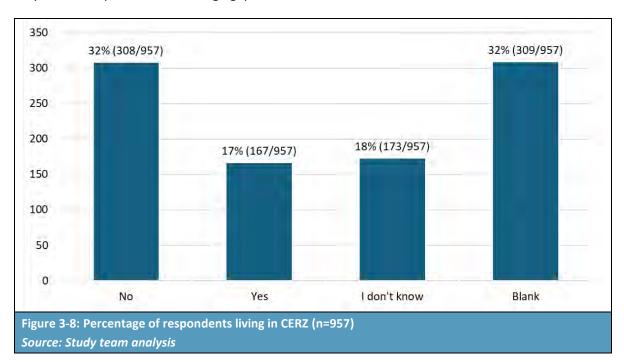


Figure 3-9 presents the respondents living in the CERZ split by location and the data associated with this is presented in Table 3-3. There is a large distribution of responses with a high number of respondents answering all three options (Yes, No and I don't know) for one location.

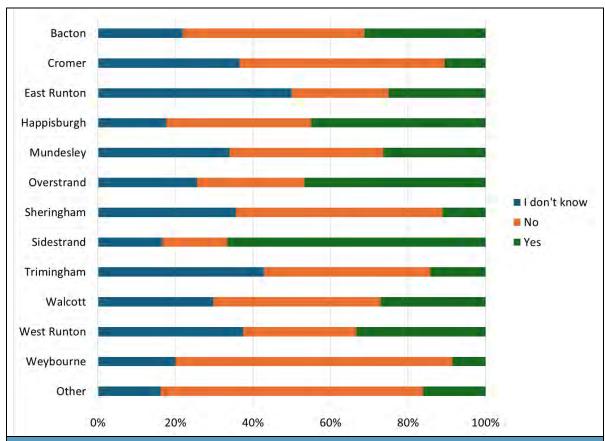


Figure 3-9: Respondents living in CERZ split by location (n=612) Source: Study team analysis

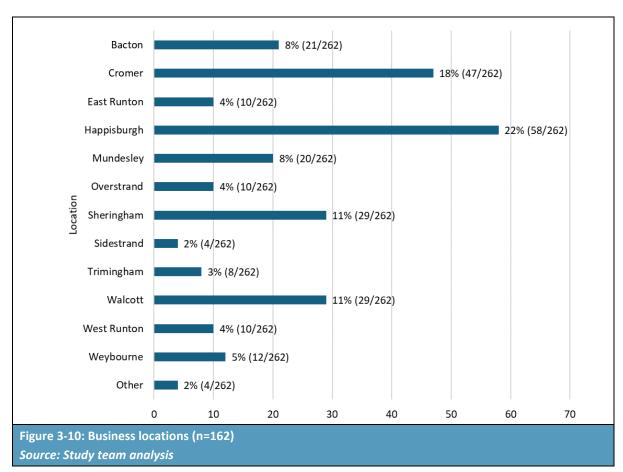
Table 3-4: Respo	ondents living in CERZ split l	oy location (n=612)	
Row Labels	I don't know	No	Yes
Bacton	22% (7/32)	47% (15/32)	31% (10/32)
Cromer	36% (31/85)	53% (45/85)	11% (9/85)
East Runton	50% (8/16)	25% (4/16)	25% (4/16)
Happisburgh	18% (25/142)	37% (53/142)	45% (64/142)
Mundesley	34% (18/53)	40% (21/53)	26% (14/53)
Overstrand	26% (12/47)	28% (13/47)	47% (22/47)
Sheringham	36% (32/90)	53% (48/90)	11% (10/90)
Sidestrand	17% (1/6)	17% (1/6)	67% (4/6)
Trimingham	43% (6/14)	43% (6/14)	14% (2/14)
Walcott	30% (11/37)	43% (16/37)	27% (10/37)
West Runton	38% (9/24)	29% (7/24)	33% (8/24)
Weybourne	20% (7/35)	71% (25/35)	9% (3/35)
Other	16% (5/31)	68% (21/31)	16% (5/31)
Grand Total	28% (172/612)	45% (275/612)	27% (165/612)
Source: Study ted	am analysis		

3.1.2 Businesses

There were considerably less responses for businesses compared to residents, with 54 out of 1005 responses (5%) from respondents who selected they owned a business (see Figure 3-1).

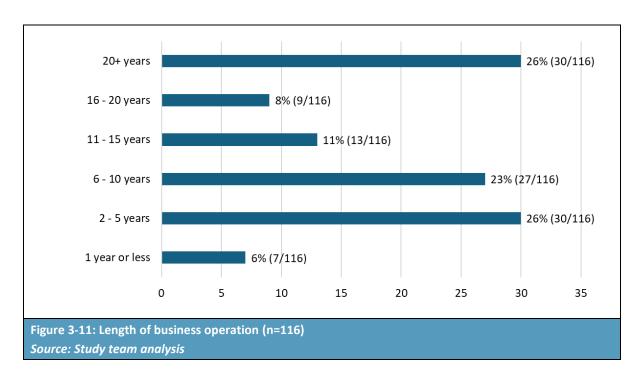
Business Location

Figure 3-10 presents a distribution of the business locations. The highest proportion of businesses were located in Happisburgh, however there were a large number of responses from the Happisburgh area in general as discussed in section 3.1.1. Locations in the 'other' category included Hemsby (25%, 1 out of 4), Fakenham (25%, 1 out of 4) and Eccles-on-Sea (50%, 2 out of 4). Respondents did report having businesses in multiple locations.



Length of business operation

Figure 3-11 presents the length of business operations. Businesses had typically been established for between 2-10 years or over 20 years (a weighted average of 10.8 years per business respondent).



Business in CERZ

Figure 3-12 presents the percentage of respondents with businesses in the CERZ. The most popular response was 'no' (43%, 52 out of 121).

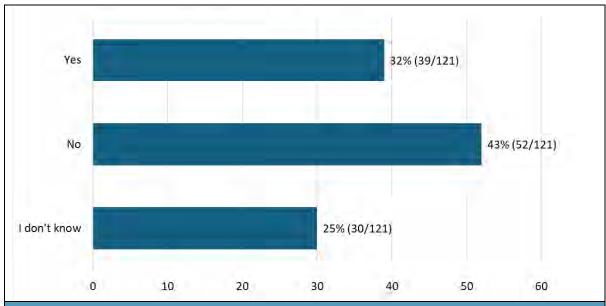


Figure 3-12: Percentage of respondents with businesses in CERZ (n=121) Source: Study team analysis

3.2 Understanding the relationship to the coast

This section includes analysis and discussion of the following question from the survey:

• Q2: What do you value most about the North Norfolk Coast?

3.2.1 Key Findings

- **Significant Value of the North Norfolk Coast:** Respondents clearly recognise the importance of the North Norfolk coast, with feedback being overwhelmingly positive. The high level of value placed on the coast reinforces its role as a central feature in the lives of the local population.
- Aesthetic Appeal and Geographical Diversity: The natural beauty of the North Norfolk coast stood out as a key theme, with many respondents praising its aesthetic appeal and the variety of geographical features. The geographical diversity also enhances its appeal to a broad range of people, offering different experiences depending on the location.
- Appreciation for Nature and Wildlife: Many respondents expressed a strong
 appreciation for the wildlife and natural environment of the coast, alongside a desire
 to protect it. This concern highlights the coast's role not only as a natural habitat but
 also as a place of ecological importance. It suggests that respondents view the coast
 not just as a recreational space but as an environment worth preserving.
- Connections to Physical and Mental Wellbeing: Respondents frequently mentioned
 the positive impact of the coast on their physical and mental health. The peaceful,
 unspoilt environment was highlighted as a retreat from daily stresses, and the
 coastline was noted for its value in supporting outdoor activities that benefit mental
 health. This underscores the role of the coast as a natural resource for health and
 wellbeing and the benefits that it can provide.
- Sense of Community: A strong sense of community emerged as another important
 value associated with the coast. Respondents appreciated the welcoming and
 friendly nature of the coastal communities, which fosters a sense of belonging. This
 could suggest that changes to the coast could impact the social fabric of local
 communities.
- Concerns about Coastal Erosion: Coastal erosion was a major concern for some respondents, who emphasised the importance of protecting and supporting the coastline for local communities and future generations. These concerns suggest that coastal management policies and plans will require community involvement and conversations with those directly affected.

3.2.2 Value of the North Norfolk Coast

Figure 3-13 presents a word cloud highlighting the most frequently mentioned words in response to this question. Overall, 'beaches' was the most frequently mentioned word (n=180) and the second most frequently mentioned word was 'beautiful' (n=118) highlighting the aesthetic value of the NN coast. Additionally, the third most frequently mentioned word was 'walks' (n=60) indicating that the NN coast is also viewed by respondents as an area of recreational value.

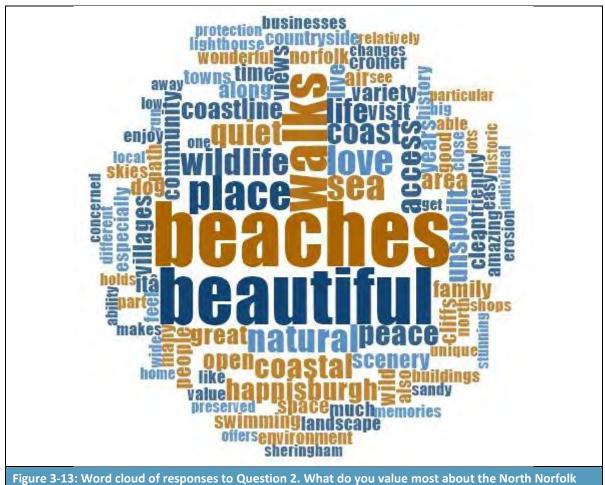


Figure 3-13: Word cloud of responses to Question 2. What do you value most about the North Norfolk Coast?

Source: Study team analysis

The responses to question 2 were coded based on the themes as shown in the coding library. A summary of the responses by theme is provided below.

Table 3-5: What do you value most about the No particular special places? Open text themes (n=7:	3-5: What do you value most about the North Norfolk coast? This can be in general or relate to lar special places? Open text themes (n=739)	
Themes	% (n/N)	
Coastal Landscapes	55% (405/739)	
Unspoiled and Tranquil Environment	28% (209/739)	
Outdoor Activities	23% (169/739)	
Wildlife and Nature Reserves	16% (119/739)	
Beaches and Seaside Recreation	10% (75/739)	
Accessibility and Inclusivity	8% (62/739)	
Sense of Community	7% (51/739)	
Sentimental Value	6% (46/739)	
Historic Sites and Landmarks	5% (37/739)	
Local Businesses and Artisans	4% (28/739)	
Local Traditions and Villages	4% (26/739)	
Visitor Attractions	3% (20/739)	

Table 3-5: What do you value most about the Nort particular special places? Open text themes (n=739)	
Themes	% (n/N)
Favourite Spots and Hidden Gems	3% (20/739)
Impact of Climate Change	2% (18/739)
Sustainability and Preservation Efforts	2% (18/739)
General Observations	2% (17/739)
Unrelated Comments	<1% (5/739)
Sailing and Boating	<1% (4/739)
Source: Study team analysis	

Coastal landscapes, Local Traditions and Villages

It was clear from the responses to this question that there was an appreciation for coastal landscapes with 55% (405 out of 739) of respondents highlighting this theme. Respondents overwhelmingly cited the natural beauty of coastal areas, countryside and the beaches. The geographical character of the coastline was cited with comments on how this changes across the coastline and respondents valued the diversity and variety of beaches "whatever the weather". One respondent commented that the uniqueness "of North Norfolk cannot be replicated". The cleanliness of the beaches was also cited multiple times with respondents valuing it being kept tidy and having a clean sea.

Respondents also mentioned how they would like the landscapes to remain how they are, with erosion being prevented. Without being prompted, some respondents expressed concern for the area and its future due to the impact of erosion. These comments suggest that respondents have limited coastal erosion literacy with a lack of awareness around the fact that coastal change is a natural process which has been the case throughout history. However, their concerns highlight how there is a need for greater understanding of coastal erosion as well as the options available for slowing down the rate of erosion which is increasing due to climate change.

Local traditions and villages were also highlighted as a theme by 4% (26 out of 739) of respondents. Respondents valued the local coastal villages describing them as "quaint" and expressing appreciation for their historical significance and the area's rich heritage. Respondents highlighted historic sites and landmarks along the North Norfolk coast, placing particular value on historic buildings, churches, and lighthouses. There was a strong appreciation for the area's heritage, with Happisburgh lighthouse (currently not in the coastal erosion risk zone) being mentioned numerous times.

Wildlife and Nature Reserves

An appreciation and the importance of wildlife and nature on the coast was also highlighted as a theme by 16% (119/739) of respondents. There was an acknowledgement that the NN Coast is an important habitat for wildlife, with respondents frequently referring to wildlife, wild nature, flora and fauna, and habitats. Also, there was a sense of enjoyment that came from being able to see and watch wildlife on the coast, for instance, one respondent noted that "the seals are amazing to watch."

Respondents often used words such as "diverse", "variety" and "biodiversity" when describing the wildlife or birdlife along the coast, highlighting their appreciation for being able to see different wildlife when they visit. One respondent mentioned that a Site of Special Scientific Interest (SSSI) is close to the area, and another mentioned that they value the North Norfolk Chalk Reef showing that there are respondents who value being near an area with rare or important wildlife or geological features nearby.

Many respondents emphasised that as well as valuing wildlife, they also valued its protection, highlighting an awareness around potential threats to wildlife. For example, one respondent wrote that they value "seeing wildlife habitats protected". Additionally, another respondent noted that they valued "wildness, wildlife and plant life, some of it rare and in danger from climate change" also showing an awareness of threats to wildlife.

Interestingly, one respondent highlighted a link between wildlife and wellbeing saying that they value "the beauty and wildlife that contributes massively to my wellbeing."

Unspoiled and Tranquil Environment

An appreciation of how the coast is unspoilt and provides a tranquil environment was evident as a theme, which was highlighted by 28% (209 out of 739) of respondents. Respondents made references to how "unspoilt" the coastline is and how it provides an expanse of space for them to enjoy with words like "open", "empty", "big skies", "open skies", "vast", "wide" and "spacious".

Moreover, there was also reference to the wildness of the coast, its uniqueness and its natural changes such as "the wildness one day then it's calmness the next". Also, many appreciated its undeveloped nature and lack of commercialism compared to cities, with one noting the contrast between "built-up seasidey bits and wilder landscapes is always exciting". They also mentioned the clean air, beach, and sea, with some stating the water was clean enough for swimming.

Many respondents described the coast as "quiet," "calm," "peaceful," and "tranquil," with one noting that you "can always find a quiet beach any time of the year." Others highlighted the coast's isolation from more developed areas, using words like "solitude," "secluded," "remoteness," and "isolated." Similarly, many respondents referred to the uncrowded beaches along the coast which provides "space to escape crowds" and "solitude out of season".

Also, many respondents described the coast as a means of escapism from everyday life, with terms like "glorious escapism" and references to leaving behind "the daily grind" and "stress of day-to-day life." They also reported feeling a sense of freedom.

Additionally, many respondents reported how the scenery and tranquil environment are therapeutic, helping them to calm their "racing brain," "ease stress," and "rebalance the soul." One respondent mentioned how the coast serves as a designated space for their "self-care", and another described, "I value the feeling of seeing the sea and walking along the shoreline, which surely must be tonic for the soul and, even if you're feeling down, it's always uplifting." Furthermore, the varied areas of the coast were also appreciated for providing both busy and quiet spots to suit the mood of the respondent.

Outdoor Activities

Outdoor activities were highlighted as a theme by 23% (209 out of 739) of respondents who often cited using the coastline for outdoor activities such as walking or running the coastal paths and swimming or paddling in the sea. Many respondents mentioned that they value being able to take their dog for a walk amongst the beautiful scenery of the coast and "dog-friendly" was a term used often by these respondents. Many respondents referenced the "accessibility" and safeness of the paths highlighting that these two aspects are important to them when choosing somewhere to go for a walk, with one respondent noting "good safe walking area that is accessible" and another, "we love being able to walk our dogs safely along the beaches." A couple of respondents also mentioned that they value the "freedom to walk."

Other respondents highlighted how they also use the coastline for general exercise, and workouts with one saying, "climbing the ramps and stairs for fitness" and another highlighting the "opportunities to exercise in a great community through parkrun and similar." Some respondents also referenced the mental health benefits of being able to exercise and take walks along the coastline.

Beaches and seaside recreation was highlighted as a theme by 10% (75 out of 739) of respondents. Other outdoor activities mentioned by respondents included fossil hunting, birdwatching, building sandcastles, bathing, crabbing, golf at Royal Cromer, camping, exploring and fishing. One respondent emphasised that "Norfolk is home to some of the best beach fishing in the UK." There was also an appreciation for being able to sit and watch the scenery of the coast, with a couple of respondents referring to "watching sunsets and sunrises."

Water sport activities were also mentioned such as surfing, paddle boarding and sailing by 1% (5 out of 739) of respondents.

Sustainability and Preservation Efforts

Sustainability and preservation efforts were highlighted as a theme by 2% (18 out of 739) of respondents. Concerns were raised by respondents over current rates of erosion and there was value placed on the provision of adequate coastal defences. Some referred to the natural beauty of the coast and how it intrinsically "deserves to be protected". The beaches, cliff walks, promenades and wildlife were all specifically mentioned as assets be preserved. And one respondent highlighted that they value beaches free from pollution.

Some respondents felt that the coast should be preserved for future generations to enjoy, with one respondent expressing that they would like their grandchildren to "experience the beaches like I did as a child and as my daughter did." Similarly, another respondent stated, "hope it won't be lost for our grandchildren".

Other respondents felt concerned for their current homes and expressed how they have lived there all their life and don't want to live anywhere else. Also, some respondents were empathetic towards residents or family members in the area and mentioned how people should not be made homeless when they've "lived there for decades and have family buried there" with an emphasis placed on "it's their home". There were also concerns for historic buildings being lost to the sea such as the Happisburgh lighthouse.

There was also recognition and appreciation from one respondent who mentioned that they live in Bacton and appreciate the recent sand scaping project.

Impact of Climate Change

The impact of climate change was also highlighted as a theme by 2% (18/739) of respondents. There was an awareness among some respondents and a concern about coastal erosion and the impact of this with many making references to buildings and homes being in danger of falling into the sea. There were emotional expressions such as "I love it all and I am afraid for its future" and "it's sad that so much is disappearing into the sea."

Respondents expressed concerns that some areas of the North Norfolk coast receive more attention and resources than others. One noted, "I do have concerns about the poor management of the coastal protection system; it appears that you are only concerned with the upkeep of Cromer and Sheringham." Another highlighted the need for more attention to Happisburgh and Hemsby, stating that "funds have poured in to protect other communities along that stretch of coastline."

Some respondents expressed frustration over the perceived lack of action to protect their local area, with one stating, "Happisburgh where my family home is/was, about to fall in but no one gives a damn!" and another calling it a "disgrace that it is being left to ruin." Others urged more action, saying, "The coastal erosion is shocking, and the government needs to do more to help save our beaches, businesses, and homes" and that the coastline "needs saving".

A few respondents noted changes to the coastline over time, increasing their awareness of coastal erosion. One mentioned, "I lived there for 18 years and for the last 50 years, I have seen how much erosion there has been," while another expressed concern, saying, "I have visited the region since the 1960s and am very concerned about the damage to the coastline." Another highlighted the loss of beach access, stating that it has been "eroded since I was a boy by private and public bodies, deleting access through their land."

Local Businesses and Artisans

Local business and artisans was also a theme highlighted by 4% (28/739) of respondents. Many respondents referred to how local businesses are important for coastal communities in providing an income through tourism such as independent and local shops, tearooms and cafes. There was also an appreciation for the people who work in local businesses such as one respondent's comment "lovely independent shops run by lovely friendly people." Also, there was value placed by residents on being able to work in their local area.

Sense of Community

Sense of community was also highlighted as a key theme with 7% (51 out of 739) of respondents. There was high value placed by respondents on the welcoming and friendly nature of coastal communities. Also, many referred to the "community spirit" of the coast either directly or indirectly such as one respondent who said, "communities are very 'local' and close-knit and supportive toward each other" and another who said they valued the "general positive atmosphere". Some also referenced the length of time that they had been part of their communities such as one respondent commenting that they value "the community they have been a part of for 70 years".

Visitor Attractions

Visitor attractions was also a theme highlighted by 3% (20/739) of respondents. There was an appreciation of a wide range of activities and attractions on the coast. This included the coastal villages and towns with their local shops, cafes, pubs, chip shops, ice cream and shopping. Specifically, Cromer, Wells-next to sea and Sheringham were highlighted by respondents as places that had good visitor attractions, and one respondent noted how Cromer and Sheringham are easily accessible by train. A few respondents mentioned that they value Cromer's pier and how there are lots of events and entertainment to go to there.

Additionally, respondents also placed value on visitor attractions in terms of bringing in tourists to help boost the local economy. One specifically mentioned how the "beautiful tombolos at sea palling" are essential for tourism.

Accessibility and Inclusivity

Accessibility and inclusivity was also a theme highlighted by 8% (62 out of 739) of respondents. Access to the beach and coastal areas was also valued by respondents who either noted the physical aspects of accessibility using phrases such as "easy access" to the beach and other coastal areas, or financial accessibility such as "free public access for all" and "the best free day out in summer on the beach day

and night". Another respondent mentioned the fact that they can "access the coast without the stealth tax for parking our car."

There was also an appreciation of public infrastructure with respondents highlighting "the coastal path is very precious and current access to the continuous coastal line is invaluable" and that they valued "extensive public access through footpaths/bridleways.".

However, some respondents highlighted concerns and issues around accessibility "I am concerned that Overstrand... has been forgotten regarding the upkeep of the promenade and the falling cliffs."

Sentimental Value

Sentimental value was also a theme highlighted by 6% (46 out of 739) of respondents. Respondents took the opportunity to share personal or family memories linked to the North Norfolk coast, making it a place of nostalgia and emotional significance. Many referenced happy childhood memories of holidays spent on the coast and visits to the beach. For example, one respondent noted "The cliffs and beaches - homes to a huge variety of wildlife and the setting of many fond memories of Granny teaching me about the birds and creatures in the tide pools." There was also a respondent who referred to future happy memories, saying how the coast is a place to make "lifelong memories with friends and family."

Additionally, many respondents highlighted the sentimental value of "home," with some mentioning that they have lived on the coast all their life or were born here e.g. "Mundesley born and bred." A strong sense of place identity was evident, with one saying, "I have a strong sense of belonging in Happisburgh," and another stating, "I live, work, swim, and exercise in this area, it is my life." Many also expressed appreciation for their home's seaside location.

Family connection to the coast was also a reason for strong sentimental feelings, many respondents mentioned that their family have lived along the coast for generations and many shared that their ancestors are buried in local churchyards. For instance, one respondent mentioned "I feel very drawn and close to Happisburgh, my father was born there, my grandfather is buried at Happisburgh," and another respondent expressed "my ancestors are from here. It's very dear to me".

Respondents also noted significant events that have taken place in their life making the coast special to them, for example, "the area means so much to us and my daughter was married at Happisburgh church."

Favourite Spots and Hidden Gems

Favourite spots and hidden gems was also a theme highlighted by 3% (20 out of 739) of respondents and historic sites and landmarks by 5% (37 out of 739). Favourite places were shared by respondents with many highlighting Happisburgh as a place that they value, referencing the beach, historical character, cliffs, church, manor and lighthouse. Walcott, Mundesley and Cromer ware also mentioned as places that respondents value.

Respondents also shared their favourite walking trails, such as "love coastal walks from Sea Palling to Happisburgh" and "walking to Cromer along the beach but also the walk towards Trimingham" and another said, "nothing beats an evening walk from Cromer to Overstrand and back for a pint in the Red Lion!"

Respondents also cherished wildlife areas which were not in the Coastwise frontage, such as, "Holkham nature reserve, Scolt Head, Blakeney and Stiffkey marshes - all unrivalled natural environments" as well as Cley beach, Muckleburgh Hill and Kelling Heath.

Other

Other responses were provided which were coded either as general observations which was 2% (17 out of 739) of respondents or unrelated comments which was 1% (5/739) of respondents as these responses did not justify creating another category. For example, some respondents showed their appreciation for the coast through general comments such as "everything it has to offer" or "too much to list". Others mentioned that they value the "the diversity" and "variety" of the coast.

One respondent took the opportunity to show their appreciation for The Deep History project which they noted helps to make people aware of and connect them to the planet's history. They also said that "The potential for clean energy production (I love the offshore wind farms). The wonderfully fresh air, compared to urban spaces. Living here feels a real privilege."

Another respondent highlighted the value of the coast from a geological perspective, "the coast has special value on account of the sedimentary archive that accumulated in the Pleistocene." And another respondent noted that the coast should be valued as "an ancient coastal community"

One respondent chose to express their concerns about second homeowners, noting that the "social fabric" of the coast is being "eroded."

3.3 Understanding awareness, knowledge and concerns of coastal erosion

This section includes analysis and discussion of the following questions from the survey:

- Q10: What do you think are the top three priorities for NN coastal communities?
- Q11: How would you rate your awareness of coastal erosion in North Norfolk?
- Q12: How would you rate your level of knowledge about coastal erosion?
- Q13: What are the main sources of your knowledge about coastal erosion?
- Q14: How interested are you in knowing more about coastal erosion?
- Q15: Are there any particular questions concerning coastal erosion that you would like to know the answers to?
- Q16: How would you describe your general level of concern about coastal erosion in North Norfolk?
- Q17: Have you or someone you know, been affected by erosion and how?
- Q18: Have you at any point sought support because of being affected by coastal erosion?
- Q19: To what extent is your overall personal wellbeing affected by coastal erosion?
- Q20: Which of the following do you associate with coastal erosion in North Norfolk?
- Q21: If you are somebody who feels concerned or worried about coastal erosion, please tick the five most important from this list.

3.3.1 Key Findings

- Coastal Erosion as the Top Priority: Coastal erosion was overwhelmingly perceived as the
 most critical issue for North Norfolk's coastal communities, regardless of demographic or
 locational filters applied. Respondents frequently linked coastal erosion to broader
 concerns, indicating that mitigating this problem is seen as key to ensuring security and
 safety in the area, both of which were considered of paramount importance.
- **High Awareness vs Knowledge Gap**: A strong awareness of coastal erosion was reported, with 90% of respondents indicating a heightened awareness of the issue. However, this high level of awareness, likely driven by the visible impact of erosion and personal experience, did not always translate into a deep understanding of the underlying mechanisms. While many respondents recognised the issue, fewer reported having in-depth knowledge of the processes behind coastal erosion, such as why and how it occurs. This distinction suggests that while the public is well-informed about the effects of erosion, there may be a gap in technical knowledge that could be addressed through education and outreach.
- Sources of Knowledge Varying by Awareness Level: The most common source of
 information cited by respondents was personal observation, underscoring the visual impact
 of coastal erosion. However, the sources of knowledge varied across awareness levels.
 Those with higher knowledge on the subject tended to rely on academic or professional
 resources, whereas those with less understanding typically drew their information from
 media coverage and personal experiences. This indicates a potential need for more
 accessible, accurate educational materials to bridge the knowledge gap among the general
 public.
- Strong Interest in Learning More: There was a notable desire among respondents to learn more about coastal erosion, indicating that communities are eager for additional information on the topic. This highlights an opportunity for initiatives like Coastwise to provide valuable educational materials. The strong interest in further information suggests that educational outreach would be both relevant and impactful.
- Widespread Concern About Coastal Erosion: Across the survey, respondents expressed
 high levels of concern regarding coastal erosion, particularly about the risks and perceived
 inadequacies of current mitigation efforts. Some respondents conveyed feelings of
 abandonment, suggesting a lack of sufficient support or action to address the issue.
 Although a minority of respondents viewed coastal erosion as a natural and inevitable
 process, the predominant theme was the need to prioritise people and communities when
 addressing this challenge.
- Personal Impact of Coastal Erosion: Respondents shared personal stories of how coastal
 erosion had affected them, primarily in terms of property and infrastructure damage, with
 economic consequences being a major theme. The emotional and psychological toll was
 also significant, as many recounted feelings of stress, anxiety, and loss resulting from the
 changing landscape. This underscores the profound effect that coastal erosion has not only
 on physical assets but also on the mental health and emotional well-being of individuals
 and communities.
- Lack of Support-Seeking Behaviour: Few respondents reported seeking support after being affected by coastal erosion. It remains unclear whether respondents do not know where to turn for help or if the necessary support systems are simply not in place to address their needs.

- Impact on Wellbeing and Mental Health: Coastal erosion has a clear impact on mental health and well-being, with respondents frequently describing feelings of anxiety, stress, and worry. There was also significant empathy expressed for those directly facing these challenges from those that were not directly affected. Respondents recounted barriers to accessing outdoor spaces for physical health. However, respondents recognised the value that being outside in nature and on the coast can bring for physical and mental health.
- Loss and Anxiety Over Changing Landscapes: Loss of homes, stress from changing landscapes, and the anxiety surrounding these transformations were key concerns associated with coastal erosion. Positive associations were rare, with most respondents focusing on the negatives, such as property damage, safety risks, and the psychological toll of watching familiar coastal environments and personal property erode.

3.3.2 Perceived priorities for NN coastal communities

Q10 of the survey asked "What do you think are the top three priorities for North Norfolk coastal communities between Weybourne and Happisburgh in the next 5 years?". Figure 3-14 presents the top three priorities for NN coastal communities.

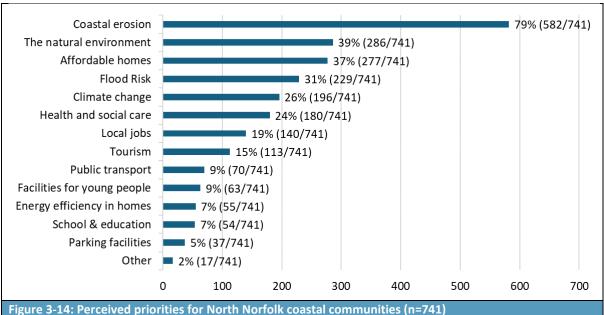


Figure 3-14: Perceived priorities for North Norfolk coastal communities (n=741) Source: Study team analysis

The top priority across all respondents was coastal erosion (79%, 582 of 741), with the natural environment (39%, 286 of 741), affordable homes (37%, 277 of 741), flood risk (31%, 229 of 741) and climate change (26%, 196 of 741) completing the top five priorities.

In total, there were 258 open text responses to this question which help to provide supplementary evidence. These have been coded against the themes, with tallies visible in Table 3-6 below. The open text responses have different response rates against the themes, with coastal erosion remaining top with 45% of respondents (116 of 258) mentioning this, with affordable homes at 22% (58 of 258) and the natural environment at 16% (40 of 258). No matter how the stakeholders are divided, whether by age, resident or business, and coastal vs non-coastal stakeholder, coastal erosion always remains the single biggest priority, and does so by a large margin.

Themes	% (n/N)
Coastal erosion	45% (116/258)
Affordable homes	22% (58/258)
The natural environment	16% (40/258)
Other	15% (39/258)
Climate change	13% (34/258)
Tourism	13% (33/258)
lood Risk	12% (32/258)
Local jobs	12% (30/258)
Health and social care	12% (30/258)
General comment	7% (17/258)
Public transport	7% (17/258)
acilities for young people	5% (12/258)
Parking facilities	4% (10/258)
nergy efficiency in homes	2% (5/258)
School & education	2% (5/258)

For residents, the biggest priorities were coastal erosion, with 42% (81 of 191) of open text answers discussing this, followed by 'other' at 26% (50 of 191), tourism at 16% (30 of 191), and health and social care, affordable homes, and the natural environment all at 15% (28 of 191).

Meanwhile, for businesses, coastal erosion was again first at 48% (42 of 87), tourism at 26% (23 of 87), 'other' at 21% (18 of 87), public transport at 17% (15 of 87) and affordable homes at 10% (9 of 87).

There were no major differences by age group, with coastal erosion being the most referenced category for each range (under 18, 18-24, 25-34, 35-44, 45-54, 55-64, 65+, and no age given).

For both North Norfolk Coast and North Norfolk District stakeholders, coastal erosion remained the top answer across both groups. For coastal stakeholders it was 42% (69 of 164) and for district stakeholders it was 50% (47 of 94). Affordable homes were the second most discussed topic by coastal stakeholders at 27% (45 of 164) and the natural environment was the second most discussed topic for district stakeholders at 15% (14 of 94).

Overall, 22% of open text responses (58 of 258) commented on the lack of availability of affordable homes, with an extensive number of comments touching on how this impacts young people in particular and forces those growing up in the area to leave it. It was noted that "it is sickening how difficult it is for young people to live in baseline adequate housing, let alone home ownership", there is "insufficient social housing", and that "communities will die if affordable homes are not available for average salaried working people". Tied to this, there was an extensive number of comments that called for more to be done regarding second home ownership in the region, which residents felt was driving people away from the region and further increasing house prices.

Of the 33 people who commented on tourism, 12 (36%) explicitly stated in their open text response that coastal erosion was having a significant negative impact on tourism, with it "being a major concern for tourism". Of these, 2 out of 11 (18%) were coastal business owners, with the rest being residents (1 in the district (8%) and 8 being coastal residents (75%)). Tourism, it was felt, was needed

to "keep the [coastal] villages alive". Coastal erosion was mentioned extensively and its influence was felt on a number of the other priorities, with links to flooding to homes and businesses, keeping local people employed, education for young people, parking, and more.

Whilst the closed answers to Q10 did not allow priorities to be ranked explicitly, the responses to the additional comment open text box clearly indicate that across both businesses and residents, coastal erosion was an overwhelmingly important top priority, to the point where it was interlinked with every other factor. It was touched on by respondents that without the rapid rate of coastal erosion being halted, or at least slowed, it was unlikely to be worthwhile dealing with the other priorities raised. All of the priorities are interlinked, and potentially difficult to fix in isolation.

Priorities of residents

Across all residents, coastal erosion was the most discussed open text response, with 42% (81 of 193) discussing the impact of erosion on topics like their livelihoods, homes, public transport, and life in general. 'Other' was the second highest category at 26% (50 of 193), tourism at 16% (30 of 193), and health and social care, affordable homes and the natural environment all at 15% (28 of 193).

In Happisburgh, coastal erosion was the most discussed open text theme by residents at 67% (33 of 49). In answers to the closed questions, 94% of Happisburgh residents (46 of 49) listed coastal erosion as a top priority. This is unsurprising given the considerable degree to which erosion affects the village, arguably more so than anywhere else in the region, with homes and infrastructure being lost. For instance, in Cromer, which had the second largest number of respondents, only 37% (14 of 38) mentioning coastal erosion in their open text response. Happisburgh residents feel coastal erosion is leaving their community "vulnerable", in dire need of "more sea defences" and that ultimately it is "hard to have other priorities if the villages are in the sea" or if "the homes in Happisburgh [are] falling in the sea". Some residents in Happisburgh (10%, 5 of 49) made specific reference to the lack of sea defences for their village, compared to those provided in places like Bacton, Walcott and Sea Palling.

Affordable homes was raised as an open text point by someone in every town or village except East Runton. This potentially highlights that the lack of affordable and social housing is felt throughout the area and is not an issue isolated to any one place. A lack of affordable housing can have knock on impacts, such as on local jobs either not being created or filled, which in turn can affect health and social care provision.

Many of the 15% (28 of 193) and 12% (24 of 193) of comments that mentioned the natural environment and climate change also mentioned coastal erosion, further highlighting that the priorities are closely linked – and in particular those with an environmental focus.

Priorities of businesses

-

There were 21 business owners who responded, who own a total of 87 businesses or storefronts across the region. Of the 21, 16 listed climate change as a top priority (76%) in their closed text answers. Further discussion below represents their opinions through their number of businesses, as this is how the data was presented to the study team. Of the 87 businesses that responded, coastal erosion was again the biggest priority, with 48% (42 of 87) mentioning it in open text responses. Of the 12 key location groups¹⁰, coastal erosion was the biggest priority across 9 of these (75%), and was ranked second to tourism at two others (Bacton and West Runton) and to 'other' at the remaining one (Trimingham). Tourism was, understandably the second biggest issue raised by businesses, with just

¹⁰ Bacton, Cromer, East Runton, Happisburgh, Mundesley, Overstrand, Sheringham, Sidestrand, Trimingham, Walcott, West Runton, Other

over one in four (26%, 23 of 87) raising concerns about possible reductions in tourism. 'Other' (21%, 18 of 87), public transport (17%, 15 of 87) and affordable homes (10%, 9 of 87) rounded out the top five business priorities. Health and social care was an important factor in Sheringham and Walcott, with 38% (3 of 8) and 30% (3 of 10) mentioning it in their responses. Businesses in Cromer and Happisburgh mentioned more priorities than anyone else, with 12 priorities mentioned each.

One business owner resident in Sheringham commented that "climate change is the... greatest risk to ours and our children's future and it is our responsibility to do all we are able before it's too late". Three business owners resident in Happisburgh commented that "coastal erosion is the biggest fear I have", it is the "top priority" and that "coastal erosion must be checked", as otherwise everything else "pales in insignificance". One Overstrand business owner commented that "erosion is the only subject where NNDC have responsibility and can effect a solution". Overall, business owners' open text responses extensively touched on coastal erosion, but also how it impacts greatly upon the other priorities, such as availability of affordable housing, health, and in particular, tourism.

Priorities by age

Coastal erosion was consistently the most important priority across all age categories, being mentioned in open text responses between 33% (1 of 3) of under 18s and 65+ (28 of 86) to 75% of 35-44s (9 of 12). There was moderate variation in other priorities, with various age groups not mentioning some of the priorities at all in their open text responses.

Public transport was equally as important as coastal erosion for the 18-24s (50%, 3 of 6), but barely registered in answers from older people, with those 45-54 at 9% (4 of 43), 55-64 at 3% (2 of 76) and those 65+ at 3% (3 of 86). The 25-34 group highlighted equally affordable housing and coastal erosion, with both at 40% (4 of 10). This may be higher for this group as this is typically the age range where people either begin to think about home ownership or purchase their first home, with the then Department for Levelling Up, Housing and Communities modelling recording the average first-time buyer age at 33 in 2022-23¹¹. Affordable homes were an important point across age groups, with it being the second most important issue for the 55-65 age group (24%, 18 of 76) and 65+ (24%, 21 of 86%), and fourth most important for the 45-54 demographic (12%, 5 of 43).

Of the 30 respondents who discussed health and social care, 26 (87%) were 45 or older, with the other four respondents all not giving an age. None of the 31 respondents under the age of 44 (12% of the overall number of open text respondents) discussed anything related to health and social care, or health related issues more widely (i.e. access to healthcare or doctors). Three over 65 respondents explicitly commented on the links between the lack of affordable homes in the region and the resulting impacts on health and social care, noting that this caused a lack of health and social care employees to be able to live in the region, with a comment on the low pay these roles can offer.

Other priorities had similar percentage rates across the age groups to the overall results, with nothing specific being raised. It is important to keep in mind that some groups (i.e. under 18s with three, or 18-24 with six) had small numbers which can cause inflated percentages. Thus, if the three under 18s open text respondents were not to mention affordable homes, which they did not, this should not be taken as a fully valid barometer of the opinions and views of under 18s across the region as a whole.

-

¹¹ Department for Levelling Up, Housing and Communities (2023). Chapter 3: Housing history and future housing. Available at: https://www.gov.uk/government/statistics/chapters-for-english-housing-survey-2022-to-2023-headline-report/chapter-3-housing-history-and-future-housing. Accessed October 2024.

North Norfolk Coastal vs District Stakeholders

For stakeholders on the coast, the top three priorities mentioned in open text responses were coastal erosion at 42% (69 of 164), affordable homes at 27% (45 of 164) and the natural environment and 'other' at 16% (26/164. This reflects issues highlighted above in discussions about residents – that affordable homes is a really important priority for coastal stakeholders.

For stakeholders not on the coast, but in the wider North Norfolk district, the top three priorities were coastal erosion (50%, 47 of 94), flood risk (16%, 15 of 94) and natural environment (15%, 14 of 94). Affordable homes was only mentioned by 13% of district stakeholders (13 of 94), compared to 27% of coastal stakeholders. Flood risk was not in the top priorities identified by coastal stakeholders. It has likely been mentioned as a major issue by district stakeholders because the county has a combination of low-lying coastal zones, rivers and fenland areas that are prone to coastal, river and surface water flooding.

It is key to note how important coastal erosion is a priority for stakeholders, irrespective of where they live within the region in terms of coastal or non-coastal. Comments from district residents make clear that they are also concerned with coastal erosion, with comments that the amount of land lost in Happisburgh is "truly horrifying", "that homes are being lost due to increasing erosion" and that "coastal erosion is a major problem", making it evident that erosion is fully ingrained in the public consciousness as a significant issue regardless of residency location.

Tourism was less of a priority for district stakeholders, with only 7% (7 of 94) mentioning it compared to 16% (26 of 164) coastal stakeholders.

3.3.3 Awareness

Respondents were also asked to rate their awareness of coastal erosion in North Norfolk, this is presented in Figure 3-15. This is important to gain a baseline understanding of perceived levels of awareness.

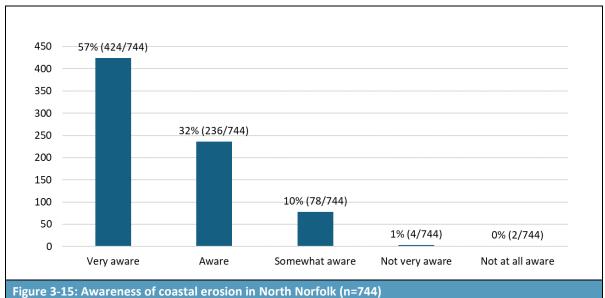


Figure 3-15: Awareness of coastal erosion in North Norfolk (n=744) Source: Study team analysis

Respondents reported a strong awareness of coastal erosion in North Norfolk. Nearly 90% (660 out of 744) of respondents reported that they were either "very aware" or "aware" of coastal erosion in

North Norfolk. There may be some respondent bias occurring in this question as respondents wanting to express their concerns over coastal erosion and have their voices heard will typically have a high awareness of coastal erosion as it is in their interest.

When split by resident location, Happisburgh had the highlighted number of respondents reporting "very aware" (22%, 92 out of 424). Of all those that responded from Happisburgh, 72% stated "very aware" (92 out of 127) compared to an average of 57% (424 out of 744). There was also a high proportion of responses from respondents who did not state a location (26%, 195 out of 744). This may indicate that even those who are not residents of the area and are visitors or residents that live elsewhere in the North Norfolk District are still aware of coastal erosion, highlighting the impact that coastal erosion has on the area. In areas where there are more amenities and attractions, such as Cromer, the percentage reporting that that they were "aware" (49%, 38 out of 78) rather than "very aware" (37%, 29 out of 78) was higher, suggesting that areas that do not suffer with such extreme impacts and are relatively more built up are slightly less aware.

Length of residence did not significantly change the level of awareness among respondents. Of those that reported that they had lived in the area for 20+ years 65% (115 out of 176) were "very aware" of coastal erosion. Of those that had lived in the area for 1 year or less, 58% (15 out of 26) were "very aware" of coastal erosion. It is worth noting that although the proportion of those that are reporting this level of awareness is similar, the sample sizes are different. All those that stated that they lived in the CERZ stated that they had some level of awareness of coastal erosion¹². For those that reported "No" or "I don't know" the distribution of responses by awareness level matched those reported in the overall data suggesting that there are no key differences here.

There were limited differences between age groups. This was difficult to differentiate as there were limited responses from those under age 45. Interestingly all respondents under 45 reported some level of awareness¹³. The 65+ age category were most likely to report being very aware with 64% (167 out of 261) of respondents from this category reporting being "very aware" higher than the average of 57% (424 out of 744). But overall, all respondents provided high levels of awareness.

3.3.4 Knowledge

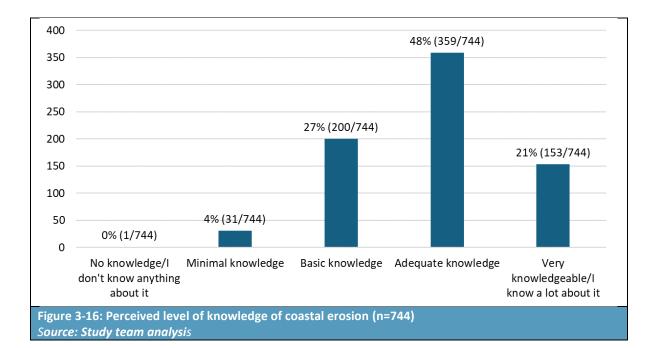
Respondents were asked to rate their level of knowledge about coastal erosion on a scale from No knowledge/I don't know anything about it to Very knowledgeable/I know a lot about it. This is presented in Figure 3-16. The most reported answer was "adequate knowledge" with 48% (359 out of 744) of respondents selecting this.

Those that reported the highest levels of knowledge around coastal erosion were those from Happisburgh, where 28% (36 out of 127) of respondents reported "very knowledgeable" compared to the average of 21% (153 out of 744). However, this group was overrepresented in the data. There were no significant differences when filtering by those that live in CERZ.

-

¹² Respondents answered either "somewhat aware", "aware" or "very aware".

¹³ Respondents answered either "somewhat aware", "aware" or "very aware". However, the sample size for this was small (12%, 90 out of 744)



When comparing by age, there were some interesting differences. Those that were older (55+) were less likely to report being "very knowledgeable" about coastal erosion, 18% (47 out of 261) compared to the average of 21% (153 out of 744). Whereas those that were younger, under 18, 75% (3 out of 4) reported being "very knowledgeable". This may reflect potential content in the curriculum at schools.

When looking at the length of residence those that had lived in the area for 20+ years were most likely to report being "very knowledgeable" with 23% (47 out of 202) of respondents reporting this compared to the average of 18% (114 out of 619). There were limited differences across other levels of awareness.

Respondents were typically more likely to report that they had a higher awareness of coastal erosion compared to a high knowledge of coastal erosion¹⁴. Figure 3-17 presents the perceived level of awareness and knowledge of coastal erosion plotted together. While the awareness likely stems from first-hand experiences and the visible impact of erosion, the knowledge question specifically asked about understanding the mechanisms behind these processes and why they occur—an area that may be less familiar to many.

The differences in these results suggest a potential gap between awareness of coastal erosion and a deeper understanding of the processes behind it. Enhancing technical knowledge of how coastal erosion occurs could help local communities better grasp the issue and the rationale behind decisions made for specific areas. This improved understanding may foster more informed discussions and community support for coastal management strategies and adaptation.

¹⁴ The questions on knowledge and awareness did not have the exact wording options however they were both spread over a five option scale. The reader is advised that these are not directly comparable.

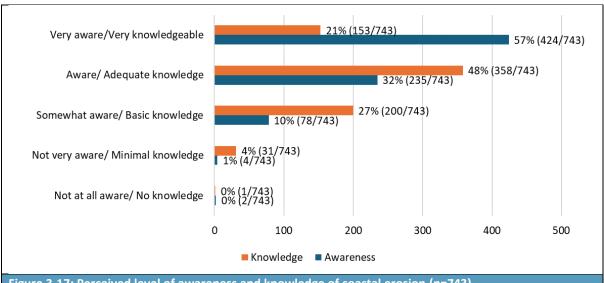


Figure 3-17: Perceived level of awareness and knowledge of coastal erosion (n=743) *Source: Study team analysis*

Sources of knowledge

Respondents were also asked what their main sources of knowledge on coastal erosion were. Figure 3-18 presents the most reported sources of knowledge on coastal erosion. The most reported source of knowledge on coastal erosion was respondents' own observations (68%, 538 out of 788), followed by news media (online) (47%, 367 out of 788) and conversations with others (38%, 300 out of 788). This suggests that the majority of knowledge comes from word of mouth and speaking with local communities. It may be these sources of knowledge are quite subjective as respondents appear to be referring to their own observations and experiences rather than information from external sources or experts in the field. Own observations were the highest reported source of knowledge across all lengths of residence however the gap between this and the next most common response increased with length of residence suggesting that those that have lived in the area for longer can see the impact that coastal erosion has had over time.

"Own observations" was the most frequently reported source of knowledge across nearly all knowledge levels suggesting the strong visual impacts that coastal erosion has. Among respondents with minimal knowledge, the top source was "news media (online)," followed by "conversations with others" and "own observations." For those who identified as "very knowledgeable," the most common source was still "own observations," but it was closely followed by "professional expertise," "scientific research articles," and "educational resources." This suggests that individuals who consider themselves highly knowledgeable on the topic tend to rely on academic and professional sources, whereas those with less familiarity primarily draw their knowledge from personal observations and media coverage.

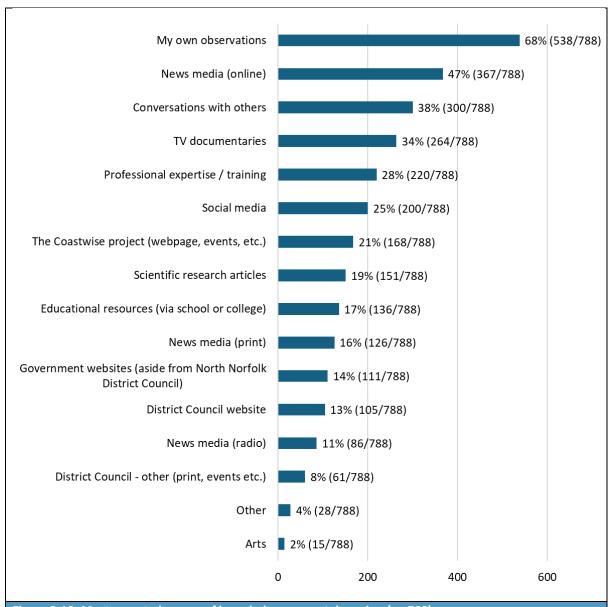


Figure 3-18: Most reported source of knowledge on coastal erosion (n =788) Source: Study team analysis

Educational resources were more common among younger respondents (<34 years) and was the most common for under 18s and 18-24 year olds¹⁵. This may include the content in the curriculum or courses at university. There were no other differences when looking at other age categories compared to the baseline¹⁶. There were limited changes in the top three sources when looking at location.

Of those that responded 'other' responses primarily reflect personal connections, local knowledge, and independent research.

Interest in knowing more

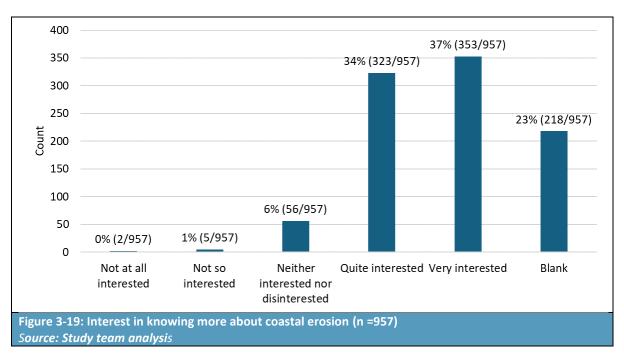
Respondents were also asked about their interest in knowing more about coastal erosion. This is presented in Figure 3-19. Overall respondents were keen to find out more about coastal erosion,

-

¹⁵ However, this sample size was very small.

¹⁶ Older age groups made up the majority of the overall responses so limited changes are expected when comparing between older groups.

indicating a clear interest in gaining further knowledge. Of those that stated that they lived in the CERZ, they were more likely to indicate that they were 'very interested' (56%, 93 out of 167) in knowing more about coastal erosion out of all other interest levels. There were no significant differences when split by location. Areas such as Happisburgh were keen to know more¹⁷, and a high proportion of respondents selected 'very interested' from Overstrand (69%, 32 out of 37) and Mundesley (47%, 25 out of 53). Areas such as Sheringham and Cromer still expressed interest in knowing more but this was only as 'quite interested' being the most popular answer with 47% (40 out of 85) in Cromer and 48% (43 out of 90) in Sheringham.



It is challenging to assess differences between age groups due to the limited responses from younger participants. However, among older respondents, there remains a strong desire to learn more about coastal erosion. When comparing interest levels with concern and knowledge, some notable patterns emerge. Those concerned about coastal erosion are eager to learn more (see Figure 3-20), but even those who consider themselves very knowledgeable still express a desire for further information. Similarly, respondents with lower levels of knowledge also show a keen interest in expanding their understanding (see Figure 3-21, with data in Table 3-7). This suggests that information materials that Coastwise provide will be relevant and desired across all knowledge levels.

_

 $^{^{17}}$ 75% (111 out of 148) reported being either "quite" or "very" interested in knowing more.

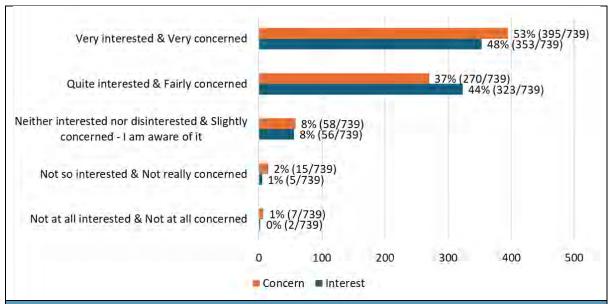


Figure 3-20: Interest in knowing more about coastal erosion with level of concern (n =739) Source: Study team analysis

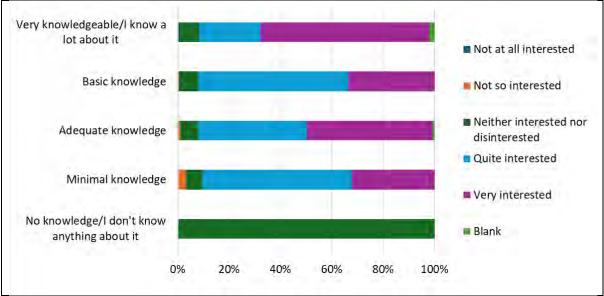


Figure 3-21: Interest in knowing more about coastal erosion with level of knowledge (n =738) Source: Study team analysis

Table 3-7: Interest in knowing more about coastal erosion with level of knowledge (n = 738)				
Options	Interest	Knowledge		
Not at all interested & No knowledge/I don't know anything about it	0% (2/738)	0% (1/738)		
Not so interested & Minimal knowledge	1% (5/738)	4% (31/738)		
Neither interested nor disinterested & Adequate knowledge	7% (55/738)	49% (359/738)		
Quite interested & Basic knowledge	44% (323/738)	27% (200/738)		
Very interested & Very knowledgeable/I know a lot about it	48% (353/738)	21% (153/738)		
Source: Study team analysis				

Questions around coastal erosion

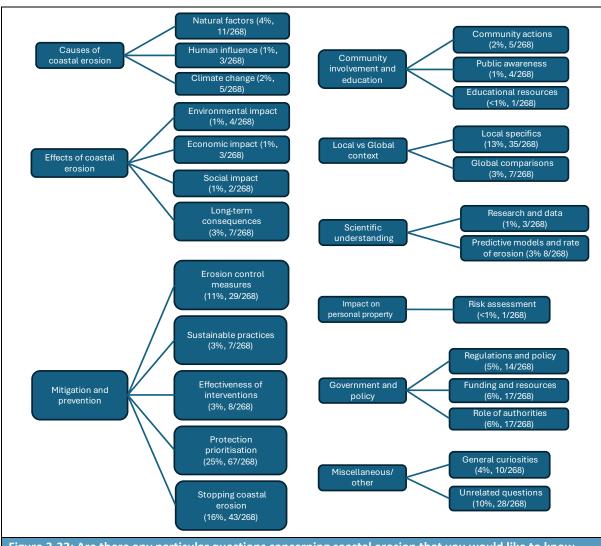


Figure 3-22: Are there any particular questions concerning coastal erosion that you would like to know the answers to? Open text themes (n=268)

Source: Study team analysis

Respondents were asked if there were any particular questions concerning coastal erosion that they wanted to know the answers to. It is important to note that respondents won't have identified every question/ knowledge gap that they have, however, these results do provide insights into some of the knowledge gaps of the respondents or where they would like more detailed information. Overall, respondents provided a broad range of questions crossing many different topics surrounding coastal erosion and the North Norfolk coast. A summary of the types of questions is provided below.

Causes and effects of coastal erosion

Many of the questions surrounded the causes and effects of coastal erosion. Questions about natural processes that contribute to coastal erosion (e.g., wave action, storms, sea level rise) were raised by 4% (11/268) of respondents, as well as questions around the human influence, e.g. inquiries into how human activities impact coastal erosion which was raised by 1% (3/268) of respondents. Respondents asked questions around how much of erosion is caused by rainfall as opposed to the sea or wanted more information about the causes of coastal erosion in the NN coastal areas (n=7, most were age 65+ apart from one respondent who was 55-64). For instance, one respondent asked, "how much

erosion is caused by the sea and how much from weather conditions on land. Whether tides could be controlled and generated energy at the same time to offset costs." Others raised concerns over, the impact of dredging (n=1), whether sea defences work long term (n=1), why drainage through the cliffs is not maintained (n=1) and when something will be done about inland water run off (n=1).

Interest in the role of climate change in accelerating or affecting coastal erosion was also expressed by 2% (5/268) of respondents. For example, one respondent asked, "is climate change speeding up erosion all around the UK?" and another expressed that they would like to know the impact of the future climate on cliff degradation (n=1). Additionally, another respondent expressed that they would like to know how erosion will combine with sea-level rise to accelerate the retreat of the shoreline, and what adaptation options are being considered/planned/implemented (n=1).

The environmental impact including effects of coastal erosion was also a theme amongst 1% (4/268) of respondents who raised questions regarding the effects of erosion on ecosystems, wildlife, and natural habitats. For instance, one respondent asked, "can we do more habitat creation?" and another asked, "which defence systems are safe for animals and have minimal impact on the natural environment?" (n=1). Questions were also raised around the economic impact of coastal erosion on the economy by 1% (3/268) of respondents. Respondents wanted to know what is being done to protect homes, businesses and farmlands (n=2). There were also inquiries into the social impact of coastal erosion by 1% (2/268) of respondents, such as how coastal erosion affects communities, including displacement, safety, and social well-being. For instance, one respondent asked how the effects of coastal erosion on the local economy can be managed alongside the social impacts and another asked why the government aren't doing more to save or compensate people who have lost their homes and communities due to coastal erosion (n=1).

Questions about the long-term consequences (future implications or projections of continued coastal erosion) by 3% (7/268) of respondents. Respondents asked about which areas are likely to be affected by coastal erosion and by flooding in the next 10 years (n=1) and how quickly sea ingress will be inland and what the implications from this will be (n=1). Additionally, another respondent asked, "what happens to the residents who lives closely to the eroded cliffs or coasts, are they required to move out?" (n=1).

Respondents also asked questions about whether there are future plans in place to deal with the impacts of coastal erosion, for example, respondents asked whether there are "long term plans to effectively live with climate change?" (n=1), whether there are plans for altered roads and footpaths, for those that have been destroyed by coastal erosion (n=1) and "will there ever be funding to provide long term sea defences along our coastline" (n=1). There was also one question about financial plans, asking, "what level of coastal protection has been sanctioned and costed on the immediate future" (n=1).

Mitigation and prevention

There were also many questions related to mitigation and prevention of erosion. There was a particular emphasis amongst 25% (67/268) of respondents on protection prioritisation and why some areas are more protected compared to others. Many respondents asked why Happisburgh is being neglected/ not protected (n= 22). Most of these respondents were from Happisburgh apart from one respondent from Bacton and one respondent from Mundesley. Moreover, some of these questions made specific references to the protection that has been placed in other coastal areas, for example, "why do Happisburgh and Hemsby have no sea defences? Sea Palling has sea defences which appear to be working" (n=1) and others asked, "why hasn't Happisburgh received funding that other places have for protection like Bacton, Walcott and Cromer". Additionally, other respondents, asked why more isn't being done in other areas such as Overstrand (n=4, all of whom were from Overstrand) and

other places were also mentioned such Trimingham (n=1, from Trimingham) and Hemsby (n=2, both from Happisburgh). Additionally, there were a few respondents who want to understand how the decision to protect certain areas over others is made (n=7). For example, one respondent asked, "how is the decision made on which part of the coastline is considered worth saving and which isn't?"

There were also questions on what can be done to stop coastal erosion by 16% (43/268) of respondents, Respondents wanted to know how we can stop, prevent or slow down coastal erosion (n=32). In particular, some respondents wanted to know what the most cost effective, viable solutions are (n=2). Respondents also wanted to know where the money is going to come from in order to help prevent erosion (n=2). For example, "how do we stop it and how do we get the money to fund it and who is the best person to tackle this?" In contrast, one respondent wanted to know "what would happen if nothing was done?" (n=1).

Additionally, 11% (29/268) of respondents wanted to know what specific erosion control measures (mitigation plans) are in place (n=7) and whether current attempts are working or not (n=2) and why more hasn't been done previously/currently (n=5). Others asked why there aren't more sea defences (n=2), why the existing ones aren't maintained and have been left to deteriorate (n=8), for example, one respondent asked, "why the breakwaters and defences at Happisburgh were allowed to fall into such disrepair" Also, one respondent asked why long-term protection isn't prioritised like it has been in the Netherlands (n=1).

Respondents also asked questions highlighting an interest in sustainable practices which included nature-based approaches to managing erosion and was asked by 2% (5/268) of respondents. Respondents asked whether planting vegetation on the cliffs or land above could help to reduce erosion (n=2). There were differing opinions on sandscaping with some respondents asking whether there will be more sandscaping as they believe it has been helpful (n=1, from Walcott) and why sandscaping isn't used more (n=1, from Walcott) whereas others believe sandscaping hasn't been very successful and wanted to know about alternative options (n=1, Bacton) or wanted to know more about the results/findings of sandscaping (n=1, Bacton). Therefore, there seems to be differing opinions on sandscaping along the coastline from Bacton to Walcott, with residents from Walcott (n=2) having more positive views of sandscaping and residents from Bacton (n=2) having more apprehensive views.

Questions regarding the effectiveness of interventions was asked by 3% (7/268) of respondents. For example, "do sea defences actually work long term?" (n=1) and "will we be protected?" (n=1). Also, another respondent stated "surely natural bays, as at Sea Palling, would have been much better for the main beach areas" compared to "ugly" cages full of rocks (n=1) indicating that the respondent is thinking of the aesthetic value of the coast being maintained when it comes to mitigation measures. Furthermore, one respondent highlighted that landslides are happening in Overstrand due to inadequate drainage and asked, "why are we not providing drainage?" (n=1).

Respondents also highlighted doubts in humans being able to take on nature and protect the coast from erosion. For example, one respondent asked whether it would be more beneficial to help residents relocate from areas at risk rather than trying to protect the coastline (n=1). Additionally, another respondent questioned, "I have been told that you cannot protect the whole coastline, parts of it have to naturally erode?" (n=1).

Government and policy

Questions about government policies (including regulations, or guidelines related to coastal erosion management) were raised by 5% (14/268) of respondents. Respondents asked whether there are plans in place (n=2) for example, "do we have a plan to manage it?" There were also questions about

transparency (n=2), with one respondent feeling that governments aren't transparent with decision making when it comes to funding allocation between coastal areas (n=1). Additionally, another respondent questioned "why are you not honest regarding maps, so many people can't sell because your maps are wrong". There were also questions around SSSI's (n=2): "Why is an area of SSSI not reviewable after changes in scientific knowledge" and "how far back does the erosion of the cliff that has SSSI status have to go before it ceases to be a SSSI?".

There were also questions around the roles and responsibilities of authorities (local, regional and national) by 6% (17/268) of respondents. One respondent highlighted the lack of consultation of authorities with coastal communities (n=1). For example, "why are villages effected [sic] like ours in Overstrand not being consulted with on this issue? ...the lack of engagement makes local suspicious that there is no plan or that the plans are bad for them personally." Questions aimed specifically at the government were about why the government isn't doing more to help with coastal erosion in Norfolk (n=9) for example, "when are we going to see more urgency from government in improving access to coastal adaptation measures, specifically improved access to funding for smaller coastal communities, who struggle to meet the current criteria of FDGIA funding?" Additionally, one respondent asked, "why the government won't commit to paying proper market value of properties lost or at risk, given they are not committing to slowing down the erosion." There were specific questions aimed at the NNDC as to why they are being passive and not doing anything about coastal erosion (n=2). Others asked what the local government is doing to support communities affected by coastal erosion (n=1).

Questions aimed at both government and local councils were about what actions they will take to safeguard the future of coastal areas and tackle coastal erosion (n=2). Also, another respondent asked, "I would like to know a simple comparison between how the different councils handle coastal erosion and how much money is put into it by them and why there is a difference if there is" as well as "would a collaborative effort be more effective?" (n=1).

Questions concerning the availability of funding or resources for erosion control measures were raised by 6% (17/268) of respondents. Respondents questioned where funding will come from (n=3) and whether there will ever be funding to protect NN coastal areas (n=4) and why more money is not being spent on the protection of the coast (n=3).

There were also questions regarding how money is currently being spent and what the budgets for different areas of the coast are and how they are determined (n=6). For example, one respondent asked, "what are the budgets for specific areas of coastal erosion, how are these determined?" and another said, "I am keen to understand why Happisburgh has not received any funding for sea defences in the last 15 years when almost all other parts of the coastline, except Hemsby have." Additionally, another respondent questioned, "how are you going to ensure that it is spent wisely considering the failure of the Pathfinder Scheme in Happisburgh?" Respondents also questioned why extra money made through offshore wind farms isn't being used to invest into areas affected badly by coastal erosion (n=2).

Scientific understanding

There were also questions related to predictive models and the rate of erosion by 3% (8/268) of respondents. Respondents expressed interest in wanting to know more about the predicted/ forecasted rate of erosion (n=5) whether it has accelerated from previous centuries (n=1) and how much erosion is predicted within different timeframes (n=1), how far places have eroded since records began (n=1) and where erosion will take place/ which areas are most vulnerable (n=3). Additionally, 1% (3/268) of respondents asked questions about research and data. Respondents want to know whether coastal erosion is currently being researched and who is monitoring it (n=1). Also, one

respondent asked when a new study will take place to update research on "the studies of sand movement are from the 1990's when dredging was happening very close, this renders the SMP out of date."

Community involvement and education

Questions about community actions were asked by 2% (6/268) of respondents. These involved questions around community involvement and how they as individuals or communities can get involved in erosion prevention or mitigation efforts (n=4). For example, respondents asked, "what can we do as individuals to help protect the region" (n=1) and "how can safer communities such as Sheringham help out more vulnerable neighbours in the short medium and long-term?" (n=1).

Although there were limited questions asked inquiring into the level of public awareness (1% (4/268) of respondents) or educational resources on coastal erosion (1/268) of respondents), respondents did take the opportunity to highlight the importance of accessible information on coastal erosion. For example, one responded mentioned that they would like to know more about coastal erosion but don't know where to look for the most up to date information (n=1). Also, one respondent wanted to know about the predicted impacts of coastal erosion (n=1). Respondents also mentioned that plans and policies to tackle coastal erosion need to be made more public (n=2) and need to be accessible to everyone to improve understanding of coastal erosion, by providing "information without acronyms and in plain language" (n=1). Furthermore, one respondent showed interest in educational programs, workshops, or resources to better understand erosion by asking "will the new Coastwise team be holding regular public meetings?".

Questions to do with erosion specific to local areas (local specifics) were asked by 13% (35/268) of respondents. Respondents wanted to know about the options to protect the Bacton Gas Terminal (n=1) and why money has been spent on "completely ineffective sea defences in front of the Bacton Gas Terminal" (n=1). Respondents also wanted to know about why the ramp in Happisburgh is not being rebuilt to a sufficient standard (n=2); one that isn't "washed away regularly". Others asked why the "bank between Cley and Salthouse has not been rebuilt" (n=1) and what will happen when footpaths and roads are destroyed by coastal erosion and whether there are places for alternative routes for the coast road (n=1) and the path from Overstrand towards Cromer (n=1). Others asked questions about what will happen to specific areas due to coastal erosion (n=2) such as in Happisburgh, Sheringham and whether Overstrand will continue to have revetments (n=1).

There were also questions which included global comparisons (including interest in how the local situation compares to other areas in the world or how other regions are dealing with erosion) by 3% (7/268) of respondents. For instance, respondents asked questions where they compared the UK to the Netherlands approach to managing coastal erosion (n=2). For example, one respondent asked "why can't the long-term protection of the coastal land and landscape be prioritised like happens in the Netherlands? Why can't the natural processes be halted or slowed by use of technology like in the Netherlands?" and another respondent asked "we know from Dutch programmes that engineering solutions are possible to protect, enhance and recover lost land. Why isn't there a national programme to protect our coastline?" Respondents also wanted to know whether the UK actively considers actions taken by other countries (n=1). Respondents also wondered why reefs are not being built to help with coastal erosion as they have seen them work in other countries (n=1). Another asked "I am also keen to understand why we cannot look at natural sea defences as deployed in other countries such as Denmark, South Africa and others to try and protect our coastline." One respondent also wanted to know how coastal erosion along the NN coast compares to other British coastlines. Also, another respondent wondered why rock formations as breakwaters have not been used as an option for the NN coast (n=1).

Impact

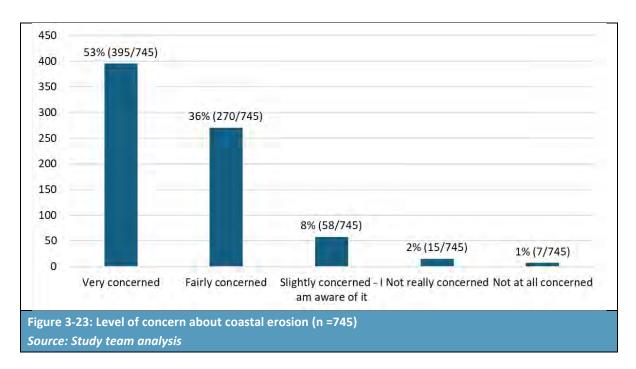
Overall there was a wide range of comments that were reported under Question 15. Many of these concerns centred on protection prioritisation, with 67 respondents raising questions about why certain areas were less protected, or why parts of the North Norfolk coast received more protection than others. This indicates a potential miscommunication regarding the rationale behind varying levels of protection. As a result, some respondents expressed feelings of abandonment or being overlooked. This highlights the need for clearer communication about the different coastal management strategies in place. However, given the sensitive nature of this issue, any discussion would need to be handled carefully and thoughtfully.

Related to this there were many questions around what can be done to stop coastal erosion (43). This suggested a belief amongst respondents that erosion can be stopped and in some cases should be "at all costs". There were limited comments associated with the practicalities of this. The way questions were phrased also suggested that it was the authorities responsibility. NNDC and national government were both mentioned in these questions. Questions were phrased in the style of "what are you going to do about it?" or "why is nothing being done?". This reflects a broader sentiment that the authorities hold the power to resolve the issue, alongside a perception that more could or should be done.

Technical questions surrounding coastal erosion appeared limited, with most respondents focusing on calls for action rather than the complexities of managing coastal change. There was a clear demand for intervention and support from authorities, emphasising a widespread expectation for decisive action. The overall sentiment suggests that coastal literacy among respondents is relatively low. This may be something that Coastwise tackles in the future so that the general public can understand why these decisions for certain areas are being made.

3.3.5 Concerns

Respondents were asked to rate their level of concern about coastal erosion. This is presented in Figure 3-23. The majority of respondents (90%, 665 out of 745) reported that they were either "very concerned" or "fairly concerned". Happisburgh (77%, 98 out of 127), Sidestrand (67%, 4 out of 6) and East Runton (64%, 9 out of 14) were the top three locations that reported the highest levels of concern ("Very concerned") compared to the average 53% (395 out of 745). There were limited differences when comparing between if respondents stated that they lived in the CERZ or not.



There were similar response rates in those that said that they were aware of coastal erosion. Of those that reported that they were aware of coastal erosion, they were also concerned about it. Older age groups were more likely to report that they were "very concerned" than younger groups, however there was a much lower response rates for younger groups.

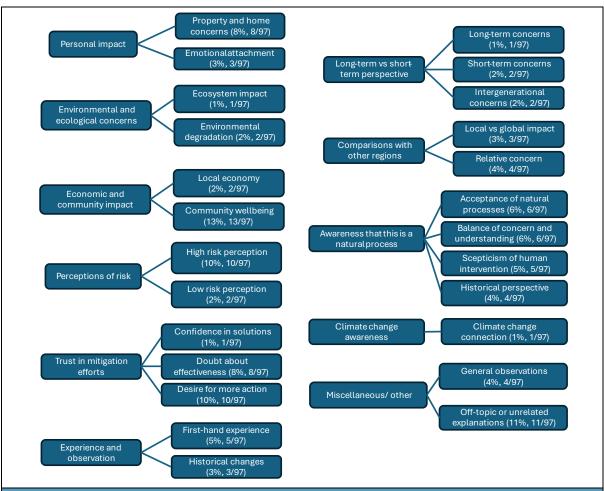


Figure 3-24: How would you describe your general level of concern about coastal erosion in North Norfolk? Open text themes (n=97)

Source: Study team analysis

Respondents were also asked to expand on their concerns about coastal erosion through opentext responses. Respondents recognised the changes in coastal landscapes and references were made to the historical changes to the coastline in the area. Respondents also shared first-hand experience and direct observations of coastal erosion (8%, 8 out of 97). Comparisons were also made with other regions that suffer from coastal erosion, such as Fairbourne (Wales) and areas in Yorkshire, comparing the situation between the two (3%, 3 out of 97). Interestingly, respondents reflected on the differences in coastal erosion management policies such as "do nothing" and "managed retreat" in these areas and commented that they "feel that some residents are misguided and ill informed" if they think it is possible to save everything.

Responses reflected significant personal impacts, particularly regarding concerns about homes, property, and land affected by coastal erosion (8%, 8 out of 97). Stories were shared of personal or family ties to the area, recounting how they or people they know have lost property due to erosion. Community impacts were also a major concern (13%, 13 out of 97), with respondents worried about the functioning of local villages and the potential displacement of residents. The emotional toll on individuals was evident, with some describing the situation as "heartbreaking." Even those not living in the affected areas expressed strong concern for the well-being of these communities. A recurring theme throughout the responses was the importance of prioritising people in addressing these issues and empathy towards those that are facing coastal erosion (7%, 7 out of 97).

Perception of risk was also a concern raised by respondents. Worries over the increasing rate of erosion were reported and the imminent threat this represented (10%, 10 out of 97). There was a sense of urgency over a need to do something now. One respondent expressed concern over not being defended with one respondent adding that "to leave us here...undefended is like signing a death warrant on our property".

Trust in mitigation efforts emerged as a key theme (18%, 17 out of 97), encompassing a variety of concerns. Respondents expressed a strong desire for more decisive action, the need for clearer policies and plans, and a sense of abandonment. There were doubts raised about the effectiveness of current measures (8%, 8 out of 97). There were calls for increased intervention and better planning to address this issue. There was also criticism of authorities' role in the situation (4%, 4 out of 97) with one respondent commenting that the "government employs a reactive and piecemeal approach to coastal erosion". There were also feelings of "nothing is being done" (4%, 4 out of 97) suggesting that respondents feel frustrated at the current approach and have a sense of abandonment. All of these respondents reported some level of awareness with 82% (14 out of 17) of respondents being "very aware".

Despite respondents raising many impacts and concerns from coastal erosion, there were some respondents that had an awareness that this was a natural process. There were a range of responses under this theme. Interestingly the majority of these respondents reported "not at all concerned" or "not really concerned" (62%, 8 out of 13). Some respondents recognised coastal erosion as a natural and ongoing process (6%, 6 out of 97) and expressed a level or acceptance or resignation to its inevitability, with one respondent reporting "It will happen and we have to live with it, not fight it." The majority of this group were NN coast stakeholders (70%, 14 out of 20) and stated they did not live in the risk zone (70%, 14 out of 20). There was no obvious trend of these opinions being held by a certain location but the most popular location was Cromer (30%, 6 out of 20). This suggests that those holding such beliefs may be less directly affected by coastal erosion, allowing them to take a more detached view, without the emotional or personal connection to its immediate impacts. There were no other obvious demographic trends amongst these respondents.

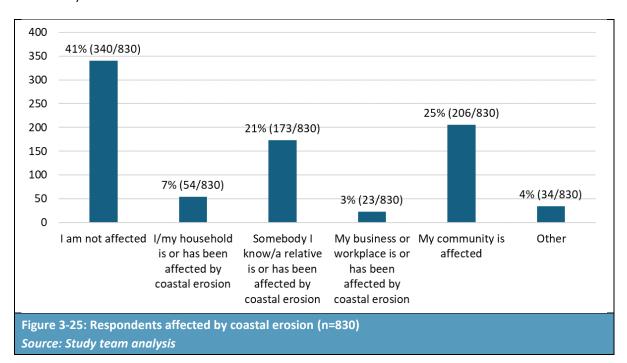
References were also made to the historical patterns of coastal change, indicating an understanding that erosion has always been a part of coastal dynamics (4%, 4 out of 97). There was also some evidence of scepticism of human intervention (5%, 5 out of 97). With comments suggesting that defences can be "wasted money" and that "engineered coastline[s] [are] not very beautiful". Interestingly, 19% (7 out of 36) respondents that answered this question replied "very knowledgeable" to Question 12 and expressed in their response that erosion was a natural process. This suggests that those that are more knowledgeable about coastal erosion have a different view over the how it should be addressed or how policy should be designed to address this. However, despite this group existing, they are in the minority.

Others had more of a balanced view, acknowledging that whilst erosion is a natural process there is still a concern about its impact on communities (5%, 5 out of 97). They explained that their concern stemmed from how we respond to the erosion rather than the erosion itself. There was an understanding that some places could not be saved but there was concern and value placed on supporting those most affected by it.

3.3.6 Affected by coastal erosion

Respondents were asked if they themselves had been affected or someone they know had been affected by coastal erosion. A new binary variable was also created using this question – "Affected by erosion" so that this filter could be applied to other questions. Out of all the responses there was a

small proportion of those that stated that they themselves had been affected by coastal erosion (7%, 54 out of 830). Most respondents either knew someone who had been affected or thought that their community was affected. Most respondents stated that they themselves were not affected (41% (340 out of 830).



Respondents were also asked to provide examples of how they or others are affected by coastal erosion. Table 3-8 presents the percentage of respondents that stated each of the themes. They are discussed in more detail below.

Table 3-8: Have you, or someone you know, been affect (n=271)	cted by erosion, and how? Open text themes
Themes	% (n/N)
Off-topic or Unrelated Examples	33% (89/271)
Loss of Land or Homes	24% (64/271)
Loss of Recreational Areas	14% (38/271)
Stress and Anxiety	9% (24/271)
Public Safety Risks	7% (18/271)
Financial Losses	7% (18/271)
Changes in Coastal Landscape	6% (15/271)
Impact on Community Cohesion	5% (14/271)
Displacement of Neighbours or Community Members	4% (12/271)
Impact on Tourism and Leisure Activities	4% (12/271)
Impact on Public Infrastructure	4% (10/271)
Unique or Uncommon Impacts	4% (10/271)
Damage to Homes or Property	3% (8/271)
Impact on Local Businesses	3% (8/271)
Impact on Ecosystem Services	3% (7/271)
Emotional Impact of Loss	3% (7/271)
Calls for Education and Action	2% (5/271)

Table 3-8: Have you, or someone you know, been affected by erosion, and how? Open text themes (n=271)			
Themes	% (n/N)		
Impact on Transportation	2% (5/271)		
Displacement and Relocation	1% (4/271)		
Cultural and Heritage Loss	1% (4/271)		
Loss of Natural Habitats	1% (4/271)		
Cost of Mitigation	1% (3/271)		
Loss of Peace of Mind	1% (3/271)		
Impact on Agriculture or Fisheries	1% (3/271)		
Health Risks	0% (1/271)		
Decline in Scenic Beauty	0% (1/271)		
Source: Study team analysis			

Property and Infrastructure Damage

One of the themes highlighted surrounded the loss of land or homes which was by 24% (64/271) and another theme was property and infrastructure damage due to coastal erosion which was highlighted as a theme by 3% (8/271) of respondents. Respondents provided examples of where erosion had caused structural damage to houses or buildings and instances where land has been lost to the sea.

There were also reports of damage to public infrastructure by 4% (10/271) of respondents. Many respondents referenced damage to footpaths which has either made them "unsafe", "closed" off to the public or caused them to disappear entirely due to landslides. Damage to the steps down to the beach at Beeston Regis was also reported by a few respondents who shared that this had made them inaccessible. Problems with access to the beach at Happisburgh was also mentioned by one respondent who said that the ramps are "constantly being recut" and then they get "washed away" again and another saying that the cliff at Happisburgh has "deteriorating revetments."

Respondents also mentioned issues with utilities, with one respondent noting that there has been a "recent loss of water supply due to cliff erosion." One respondent also gave a first-hand recount of having to move from their home due to erosion, saying "I lived on the coast but sold as I didn't feel comfortable after the surge in Bacton as it damaged my property. Additionally, another respondent expressed that they are "keen to sell their property in Winterton due to the alarming rate of erosion in this area."

Economic Impact

The economic impact from coastal erosion was also raised. This included financial losses (raised by 7% (18/271) of respondents), the impact on local businesses (raised by 3% (8/271) of respondents) and the cost of mitigation (raised by 1% (3/271). Respondents highlighted the difficulties of selling coastal properties. One respondent noted the worry that residents face in not being able to sell their properties and move away from the quickly eroding coast. Even if residents do manage to sell, respondents highlighted property devaluation (falling house prices) which means that residents lose money when they sell and rebuy further inland where prices are more expensive.

The financial impacts of staying in a costal property was also noted by respondents who mentioned the rising cost of insurance and the lack of opportunities to "gain a mortgage" on their property. Another respondent expressed how they would love to invest in the repair and upkeep of their coastal

property but "cannot justify investment when the life span of the property and future value continues to decline".

Also, one respondent noted the change of financial circumstances due to coastal erosion of their family friend who lost their house to the sea and all the money they had put into the property, forcing them to live in a council house outside the area. And there were concerns about whether those who do become homeless will be adequately compensated for it.

Respondents also noted the impact on local businesses such as: the loss of business due to premises being lost to the sea, the closing of businesses due to limited visitor access to the beach (and reduced spending by visitors) and the feeling of uncertainty for the future of businesses. One respondent gave a firsthand account of closing their business due to coastal erosion, explaining, "we lived on Beach Road Happisburgh, closed our Dairy and sold up before our house fell in the sea."

Respondents also highlighted the cost of mitigation. One noted that all coastal communities are impacted by erosion, either directly or through the cost of defences. Another perceived that "money is wasted on ineffective coastal defences, e.g Happisburgh." Additionally, one respondent pointed out that erosion prevention is costly and not always successful, questioning where the limited funds should be focused.

Environmental and Ecological Impact

Respondents took the opportunity to mention the environmental and ecological impact of coastal erosion. Respondents mentioned how coastal erosion is causing the loss of natural habitats and devastation to wildlife and the environment which was highlighted by 1% (4/271) of respondents.

The impact on Ecosystem services was also highlighted by 3% (7/271) of respondents. A few respondents referred to flooding or an increase in flooding. One respondent attributed the recent increase in flooding due to rising sea levels and extreme weather events and another specifically highlighted flooding which occurred after "seawater overtopped the defences prior to the sandscaping."

Changes in coastal landscape was also highlighted by 6% (15/271) of respondents. For instance, many respondents referenced the changes to the cliffs, referring to them "crumbling" and reporting how specific areas such as the cliffs between Sheringham and Cromer, and Holkham bay, have changed dramatically compared to previous years.

Interestingly, one respondent viewed coastal changes positively, noting how, as a fossil collector, they enjoy finding new items which are exposed as areas erode. They also noted their appreciation of the beauty of the changing cliffs and beach, "the fascinating layers of clays, sands, silts, stones from ice ages and ancient forests.".

Community and Social Impact

The impact of coastal erosion on community cohesion was also highlighted by 5% (14/271) of respondents. For example, one respondent notes that he has spoken to people living on the coast and has heard their "concerns or laisse fair attitude," adding that he is compassionate towards the latter "as it is overwhelming". The sense of community spirit was also described as being affected by coastal erosion with respondents noting that their communities have "polarised opinions" feel "abandoned" and "let down" by the perceived lack of a plan, safety net or help from others. Other feelings felt by communities were anger, stress and anxiety. Specifically, one respondent noted that that there is "an

air of discontent re the future of Overstrand" due to money going elsewhere rather being directed into the repair and or replacement of the gabions along the promenade. Financial issues were also noted to be putting a "strain on coastal communities". One respondent chose to highlight the importance of coastal community, especially during these "times of rapid and obvious change."

The risk of cultural and heritage loss was also a theme highlighted by 1% (4/271) of respondents. Respondents noted that the Happisburgh lighthouse is in danger of being lost to the sea, with one respondent comparing it to "the erosion in Suffolk at Orfordness, where the lighthouse had to be demolished." Other respondents mentioned the loss of caravan sites due to coastal erosion and were concerned that the heritage of areas could be "compromised due to lack of funding." Another respondent mentioned how the "the lifeboat station relocated".

The displacement of neighbours, friends or community members was also evident as a theme, highlighted by 4% (12/271) of respondents. Many noted that people they know, directly or indirectly, have had to move away from the coast. One respondent shared that while living in Happisburgh, children in their children's school lost their homes, and another family lost their home and presumably relocated inland as the children never returned to school.

There was also a sense that coastal communities come together in times of difficulty. One respondent recalled how school mothers collected uniforms, toys, and clothes for a family whose home was flooded. Another noted that while the media romanticises communities as "tight knit" during floods, in reality, families are "simply trying to survive with minimal government support".

Changes to community over time was also expressed by a respondent who has lost touch with people from their community as the people they grew up with, didn't stay or want to build their lives there. Additionally, another respondent noted that many people move away because they can't afford to live where they are born "due to second and third homeowners."

Emotional and Psychological Impact

The emotional and psychological impact was also raised by respondents, 9% (24/271) of respondents highlighted the stress and anxiety caused by the risk of coastal erosion. Respondents reported many concerns such as the fear of losing properties and being displaced, the inability to sell their houses and move away, the risk of cliff falls and how these could damage their home and defences not stretching far enough to protect their homes. Also, there were 1% (3/271) of respondents who reported a loss of peace of mind, for example, one respondent alluded to heightened anxiety by saying that they are constantly aware of the "sea and it's state." Additionally, another respondent mentioned "I live very near to the cliff top and worry every time there is a storm about the cliff erosion".

Many also expressed their concern for other people who lose their homes or businesses due to coastal erosion and worried for those with serious mental health problems dealing with the anxiety over whether they will lose their home or not. One respondent specifically highlighted that "by publishing the prediction of so many houses falling into the sea, NNDC have increased anxiety for locals." Others who felt less directly affected still expressed alarm, with one respondent noting "I am quite a way from the coast - under 3 miles - but the rate of erosion is alarming and far beyond the expectations of previous estimates" and another respondent saying, "the amount of erosion due to cliffs collapsing this winter has been frightening."

A few respondents also referred to the trauma that locals experience. One respondent highlighted that displaced residents have to deal with the trauma of the loss of their home as well as their finances but adds that "it goes much deeper than just property, it's the loss of the sense of belonging, a sense

of self and identity." Additionally, another respondent referenced complex post-traumatic stress disorder (CPTSD), adding that "living through prolonged periods of anxiety, depression, hopelessness, feeling powerless to help yourself out of this situation" has likely contributed to the significant mental and physical health of residents. Other respondents also made a link between mental health and the impact of this on physical health.

The emotional impact of loss was also a theme highlighted by 3% (7/271) respondents who recalled stories of emotional distress caused by the loss of property, places and the impact on community. They reported feelings of sadness over the loss of places that hold memories for their families and how places they like visiting might be changed or lost. They also reported the emotional impact of the loss of homes. One respondent recalled that they have heard stories from local people of "their heartbreak at losing homes." And another respondent mentioned "I don't live in Happisburgh but care very deeply for the village - it hurts me to see it receding at such an alarming rate, and the negative effect this is having on the residents."

Impact on Recreation and Aesthetics

The loss of recreational areas was also highlighted as a theme by 14% (38/271) respondents who gave examples of how erosion has affected beaches, parks, or other recreational areas, limiting access or usability. Respondents noted how beaches have been "lost" and how there is limited access to beaches due to access points such as footpaths and steps being blocked due to damage or dangerous conditions. For instance, one respondent highlighted that "the attraction of the beach is becoming less viable as the ramp always erodes." Additionally, a few respondents mentioned other recreational areas such as their favourite pub in Happisburgh which has been affected and the risk to Happisburgh car park and playground of being "washed into the sea."

The decline in scenic beauty was also mentioned by one respondent who highlighted the reduction in the aesthetic appeal of the coastline due to attempts to mitigate erosion, mentioning that the rocks put on the beach at Cromer, which although necessary, "will adversely impact the visual amenity of the promenade."

The impact on tourism and leisure was highlighted by 4% (12/271) of respondents who reported instances where erosion has negatively impacted tourism, local leisure activities, or public enjoyment of the coast. For example, a few respondents mentioned how there has been a loss of accommodation and the moving of static caravans to new sites due to coastal erosion, which have affected tourism. Additionally, the limited access to the beach and lack of access to safe parking was also cited as impacting tourism. Additionally, one respondent noted a lack of visitor attractions "there are no shops, no hotels, no pub and visitors travel to attractions elsewhere."

The negative impact on tourism raised concerns for some respondents such as one who commented "with the tourist industry being a big part of these communities, if access to beaches and roads is stopped due to erosion how will these businesses survive and jobs?" And another who asked, "how can we expect tourists to visit when they cannot access the beach?"

Health and Safety Concerns

Public Safety Risks was a theme highlighted by 7% (18/271) of respondents, who provided descriptions of increased safety risks due to erosion, such as unstable cliffs, landslides and flooding. One respondent said, "my family walk along the cliff bottom and there are regular cliff slides which are dangerous." Also, many noted how coastal walking and beach walking is now dangerous and unsafe, especially after "heavy rain/storms" and "spring tides" with some making sure they avoid walking after

these. Others mentioned "cliff falls" which have blocked pathways, raising concerns over safety and one respondent noted that they have seen cliff falls near to them when they have been walking the beach, multiple times. Furthermore, one respondent also mentioned that coastal erosion can present dangers such as interrupted/ lost lifeboat facilities.

Additionally, respondents raised concerns over the fact that people have begun to increasingly use the cliffs for access to the beach which "is dangerous for them and disastrous for the cliffs." Another respondent provided insight as to why this is the case mentioning that "we don't have any beach access without either walking to Cart Gap or Walcott and people are taking risks walking down the cliff where it forks."

One respondent shared their concerns over the quality of coastal path repair with one noting "any walk along almost any part the coastal path will show you examples of recent slippage, realignment and botched repair work mostly left of non-professionals as far as I can see...no serious commitment to the matter at all."

Awareness and Education

Calls for education was a theme highlighted by 2% (5/271) of respondents, who took the opportunity to call for more education, community action, or better preparedness. For example, one respondent said, "our house insurance is rising, and the community are worried as we can see no visible plan of action or strategy to stop the erosion, landslip and crumbling infrastructure." Also, two respondents called for more action for Happisburgh with one expressing "we wish for defences" and another saying "our friends in Happisburgh need rehoming to be safe! Please help them!"

Moreover, another respondent mentioned how the communities need to be talked to about "viable and innovative solutions" rather than just how inevitable their loss is and how they need to move further inland. According to them, they have heard that there is money available to "help the communities adapt, but nothing to help us in our very imminent situation."

Indirect or Secondary Impacts

The indirect impact of coastal erosion on transportation was highlighted as a theme by 2% (5/271) of respondents who gave examples of erosion affecting transportation routes, making access to certain areas difficult or hazardous. For example, respondents noted the loss of roads and the "occasional closure of the coast road at Walcott" which "can cause traffic problems on the narrow country lanes used to bypass." One respondent also noted that that homes are being pushed further inland "without the proper public transport routes."

Descriptions of how erosion has impacted local agriculture were also provided by 1% (3/271) respondents. For instance, adverse impacts on farmland were reported, such as the "salination of inland areas" and the "loss of good farming land." Additionally, one respondent noted an indirect impact on agriculture due to unsafe walking routes from Eccles/Cart gap across to Happisburgh, which means that people walk through the farm fields, negatively impacting crops.

Miscellaneous/Other

Responses that didn't fit under the codes were either categorised as 'unique impacts' which was 4% (10/271) of respondents or as 'off topic and unrelated examples' which was 33% (89/271) of respondents. A unique impact of coastal erosion was a respondent mentioning how they had been affected mostly positively due to coastal erosion "exposing the sedimentary archive" but they also noted that "it destroys it too - you can't have both." Another unique impact was a respondent who

mentioned how their friend "has lost their fishing boat shed to coastal erosion." One respondent also expressed a desire for more information "we have a caravan in Happisburgh and selfishly we'd like to know how long we have until we need to relocate."

A theme that was evident amongst many respondents was the perception that no one is helping coastal communities adapt or move away as well as a lack of communication and action from those in authority. For instance, many respondents expressed that they felt that Happisburgh "is being ignored and no money allocated for defences," and is "being left to fall into the sea." They also expressed sadness due to the "lack of central government support for the community there and their fight to slow down the rate of erosion." Also, another respondent said that they believed that Natural England were "happy to let it fall into the sea" as they wanted a managed retreat for Happisburgh and nearby villages. Others made more general comments "we understand that no efforts will be made to protect our particular stretch of coast" and "the village is falling into the sea and nothing is being done to prevent it." And another said that the "coastal section between Ostend and Eccles appears to have been forgotten without a real explanation being given." In fact, one respondent believe that authorities are choosing to protect the coastal communities which they believe are "valuable/ posh enough" and forgetting about the others, saying that "especially in the light of the fact that there had been the opportunity to protect Happisburgh from erosion."

There was also a perception that local government are choosing to turn the other way, "so many people and businesses I know are impacted in a way that is not being captured, as if it suits to not see what is really going on." And that coastal properties which are affected by coastal erosion "are seemingly being sacrificed at the whim of local government." There was also a lack of faith in local authorities to take appropriate action with one respondent mentioning that there is an "inability to make proper decisions about infrastructure, planning, employment opportunities, limiting tourism, net zero etc," and another respondent who mentioned that there is words of support for those losing their houses but no action taken to put it in place. There were also expressions of frustration due to lack of communication and answers, for example "hundreds of homes are at risk, and we are unable to get a reasonable response on future funds for defence maintenance."

There were a few comments about the actions taken to help Bacton, for example, one respondent noted the sand sculpting and another mentioned "although Bacton has been protected the wider community is at risk."

Additionally, another theme was respondents mentioning business related concerns. For example, a few respondents mentioned how members of their family have businesses on the coast which are under threat, such as one respondent who said, "Dad farms a field ad Mundesley that is now very close to the cliff" or how it affects them directly such as one local business owner whose business is currently getting "closer to literally falling into the beach below."

Additionally, many respondents stated where they, their friends or family live along the coast and some expressed concern due to coastal erosion e.g. "cliff erosion affects Mundesley, where I live" and "a friend has a home very close to the Hemsby coastline."

Furthermore, some respondents made comments that express concern at this observed increase in the rate of erosion, such as, "losses have been much quicker than predicted" and "people will lose their homes as it continues at the rate it is and a lot sooner than thought a few years ago" and "I am affected in so far as am a frequent visitor and the rapid rate of erosion will affect amenities for visitors as well as the far more important homes that are under threat."

Interesting comments were made that suggest an awareness of coastal erosion amongst some house buyers who consider coastal erosion as a factor in their decision making. For instance, one respondent mentioned "we recently moved into the area and did a lot of research on erosion and discounted a few potential houses because of that." Also, one respondent noted that they are rethinking their plans to retire by the coast.

Other respondents mentioned how they are not directly affected themselves but either know people that are affected or are concerned for those who are affected e.g. "I live behind flood defences at Cart Gap but others will lose their home and will not be compensated." Also, one respondent mentioned that they are not affected yet but worry for the future, "currently I am not affected, but I'm concerned for the future as I live about one and a half miles behind Happisburgh.".

Impacts

It is clear from the responses that respondents have been affected by erosion either directly or by through the impacts on their friends, families and local communities. Out of the themes which are not considered as an 'other' category such as 'off-topic or unrelated examples' and 'unique or uncommon impacts', the most common theme amongst respondents was the loss of land and homes (24% (64/271) of respondents). This shows that many respondents know of people who have lost their homes or have lost their own homes themselves due to coastal erosion. This theme had strong links to the third most common theme which was stress and anxiety, 9% (24/271) of respondents, with many respondents highlighting that the fear of losing their homes or worrying about others losing their homes or businesses was a large source of stress and anxiety. This signifies that one of the effects of coastal erosion is on the mental health of those that live or know others that live along the NN coast. There were differing feelings when it comes to the effects of coastal erosion on the loss of homes, some respondents expressed not wanting to leave their home/area, whereas others were wanting to leave and move somewhere safer. For those that want to move, many of those face difficulties in being able to do so, due to house prices being too high elsewhere and the lack of compensation and help with finances to move. This highlights a challenge to residents in how coastal retreat is managed and provides examples of the barriers that are facing individuals in this position.

An important thing to note is that one of the respondents highlighted that the loss of a home can be traumatic for people not just because they have lost their home, and their finances have been impacted but also because they can lose their sense of belonging and their sense of self and identity. Consequently, continued support and mental health facilities which are accessible are important parts of looking after coastal communities which should extend to those that have moved away from the area.

The second most common theme was the loss of recreational areas which was highlighted by 14% (38/271) respondents. The limited access to recreational areas such as the beaches and coastal paths has affected respondents. Considering that the top two words that emerged from Q2: What do you value most about the North Norfolk coast? were 'beaches' (n=180) and 'walks' (n=60) respondents clearly value the recreational opportunities that the NN coast provides. Therefore, as coastal erosion has caused damage to some of the access points to beaches such as footpaths, steps and ramps, it is important that these access points are repaired and maintained so that the NN coast can still be visited and enjoyed by everyone. This also links to public infrastructure damage, as respondents noted that footpaths have become unsafe or inaccessible (due to being blocked by landslides or due to cliff falls). Respondents raised concerns over people choosing to take alternative paths to access the beach which are dangerous to them and damaging to the cliffs. This suggests that there is the need for alternative routes when one route/footpath becomes inaccessible which are clearly labelled for visitors to use to prevent them from taking unmarked routes which are a public health and safety risk.

Furthermore, the NN coast needs to have accessible car parks so that tourists can visit the coast. Respondents highlighted that without access to the beach and other leisure activities, then tourists won't visit the coast which will affect the local economy (employment and businesses) which the coast relies on, which is an additional reason why it is important to maintain recreational areas along the NN coast.

Calls for education was another important theme highlighted by respondents, many of which perceive that authorities are not helping coastal communities or that some areas are being helped more than others, as well as a lack of communication and action from those in authority. This has meant that many respondents in coastal communities feel neglected and abandoned. This raises an opportunity for improved communication to share plans and strategies with coastal communities so that they aren't just aware of the risks/ predicted impacts of coastal erosion but also the action plans to mitigate impacts to help relieve some anxiety and worry amongst them. This is especially important as in Q10, many questions asked about what authorities are doing/ going to do about coastal erosion and how they will support those communities affected by coastal erosion which further highlights the need for more communication, action and involvement between local authorities and coastal communities so that coastal communities feel involved, listened to and reassured that there are action plans to help them.

3.3.7 Seeking support

Figure 3-25 presents the number of respondents that have sought support because of being affected by coastal erosion. The majority of respondents did not report seeking support (69%, 663 out of 957). Figure 3-26 presents those that reported "yes" by location. Of those who did report seeking support, the majority were from Happisburgh, however there were a few responses from respondents who did not provide a location.

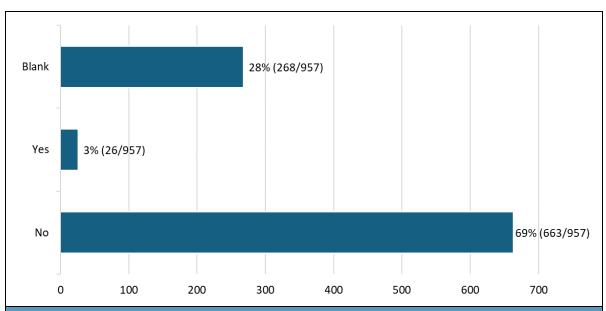


Figure 3-26: Respondents that have sought support because of being affected by coastal erosion (n=957) Source: Study team analysis

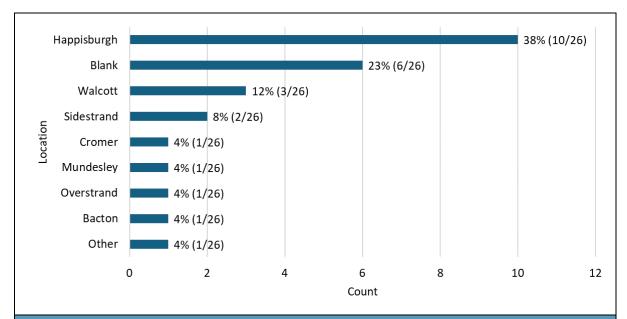


Figure 3-27: Respondents that have sought support because of being affected by coastal erosion, by location (n = 26)

Source: Study team analysis

Respondents were also asked to explain more however this had a low response rate and had limited added value (46). Types of support included receiving a grant (1 out of 46), support from an organisation (7 out of 46) or taking action themselves by fundraising or advocating for areas (3 out of 46). There were also reports of people trying to access help but this being unavailable (5 out of 46). One respondent provided stories of asking about improving sea defences, but this did not result in anything.

3.3.8 Wellbeing

Note: the analysis for this question has considerable limitations. The question asked respondents to rate how coastal erosion affects their overall personal wellbeing on a scale of 1-10, but this combination of wellbeing and impact measurement led to confusion for some respondents and there was evidence that respondents had interpreted this in different ways. More responses were received for negative impact scores. Respondents scoring 5-10 often reported that coastal erosion had a significantly negative impact on their wellbeing, while those scoring 1-5 generally cited good mental health and felt less affected, often living further from the coast. Notably, no respondents indicated that coastal erosion had a positive effect on their wellbeing.

Please see 4.1 for more details. The findings in this section should be considered alongside these limitations, and any use of this information must include the associated caveats to ensure accurate interpretation.

Figure 3-28 presents the wellbeing scores by distribution of responses. The highest reported score was 5 or 6, indicating a neutral response. This may indicate that respondents did not have a positive or negative impact on their wellbeing from coastal erosion. Respondents from Happisburgh were more likely to report a negative impact with 46% (52 out of 113) of respondents reporting a score

higher than 7 compared to the average 28% (186 out of 666). Other locations tended to follow the distribution in the baseline and there was no change when compared to living in the CERZ. There were limited differences if the respondent was a NN coast stakeholder.

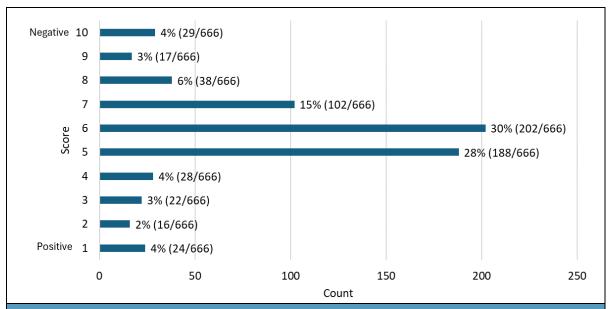


Figure 3-28: Distribution of responses to wellbeing impact (n=666) Source: Study team analysis

When comparing wellbeing to level of concern there were some interesting results. Of those that reported a score of 10 (extremely negative impact from coastal erosion) nearly all expressed that they were 'very concerned'. Interestingly, even among those with lower scores (indicating a strongly positive impact from coastal erosion), a substantial proportion still expressed concern. This suggests that, despite coastal erosion not directly affecting their individual well-being, respondents may still experience a sense of altruism or broader concern for others.

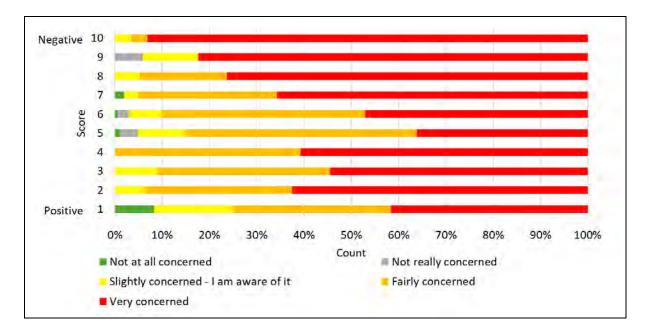


Figure 3-29: Wellbeing and level of concern (n=666)

Note: In the survey 1 indicated a strongly positive, 5 was neutral and 10 was an extremely negative Source: Study team analysis

Table 3-9: Wellbeing and level of concern (n=666)					
Options	Not at all concerned	Not really concerned	Slightly concerned - I am aware of it	Fairly concerned	Very concerned
1 (positive)	8% (2/24)		17% (4/24)	33% (8/24)	42% (10/24)
2			6% (1/16)	31% (5/16)	63% (10/16)
3			9% (2/22)	36% (8/22)	55% (12/22)
4				39% (11/28)	61% (17/28)
5	1% (2/188)	4% (7/188)	10% (19/188)	49% (92/188)	36% (68/188)
6	0% (1/202)	2% (5/202)	7% (14/202)	43% (87/202)	47% (95/202)
7	2% (2/102)		3% (3/102)	29% (30/102)	66% (67/102)
8			5% (2/38)	18% (7/38)	76% (29/38)
9		6% (1/17)	12% (2/17)		82% (14/17)
10 (negative)			3% (1/29)	3% (1/29)	93% (27/29)

Note: In the survey 1 indicated a strongly positive, 5 was neutral and 10 was an extremely negative Source: Study team analysis

There was also the option to explain more. This was critical as this provided context to the scoring and also provided further detail in how coastal erosion impacted wellbeing.

Respondents recognised that there was a benefit to being outside (10%, 16 out of 161) and comments were made about the beauty and the fresh air of the coast and the need to be able to escape outside. There was a clear awareness here about the importance of the natural world and connection to nature and its impact on wellbeing. Connecting this with the values and feelings expressed in Q2¹⁸ earlier there is certainly an understanding amongst respondents about the benefits that being outside and surrounded by nature can bring. There were concerns that if coastal erosion was to cause closure or problems in accessing the beach then this could cause unhappiness and a reduction in wellbeing (8%, 13 out of 161). One respondent also raised that the defences that are put in place can affect their enjoyment of the coast. Interestingly, there was evidence that some respondents believed that erosion is a natural process (5%, 8 out of 161) and that fighting against it is not sustainable long term. Despite this there were calls to better manage this and provide support.

Some respondents mentioned that they were not directly affected by erosion (13%, 21 out of 161) commenting that as they don't live there, they are not affected. There was also a feeling of empathy in the comments from these respondents. Respondents commented that they are not personally affected but they feel empathy for those that have lost their homes and expressed a need for these communities to be supported (8%, 13 out of 161). One respondent explained that they weren't affected by erosion so therefore it didn't have an impact on their wellbeing but expressed that they

What do you value most about the North Norfolk coast? This can be in general or relate to particular special places.

had a "social conscience". Typically, there were lower impact ratings from those that were living further away from affected areas¹⁹.

Respondents also expressed worry about the impacts of coastal erosion and concerns for the future of the area. There was concern and some anger towards authorities (13%, 21 out of 161) and feelings of abandonment were expressed. There were descriptions of feelings of anxiety, stress and worry about the impacts of coastal erosion (47%, 76 out of 161) and these were often provided by respondents that provided scores 7-10. Safety issues were also reported and were cited as reasons for worry (2%, 4 out of 161). Respondents also explained that they are not able to undertake outdoor activities that contributed to a positive wellbeing now because of the impact of coastal erosion (8%, 13 out of 161). This was due to areas feeling unsafe or coastal paths not existing. One respondent mentioned that they were concerned about property devaluation and expressed concern over what will happen in the future. There was a feeling among respondents that the situation was worsening, leading to a more negative impact on their wellbeing.

3.3.9 Key associations with coastal erosion in North Norfolk

Respondents were asked from a multiple-choice list what they associated with coastal erosion in North Norfolk. The results are presented in Figure 3-30. The highest reported answers were the loss of homes (89%, 660 out of 743), changes to coastal landscapes (84%, 627 out 743) and stress and anxiety amongst local people (72%, 536 out of 743). The loss of homes and changes to coastal landscapes are both very visible elements and it is understandable that these have a high association with North Norfolk. The stress and anxiety reported also shows the impact that coastal erosion is having on local communities' wellbeing, and this was demonstrated in the response to section 3.3.8.

¹⁹ This was not based on the locations recorded from Q3 but was mentioned in the respondent's individual response as a reason for why they were not affected.

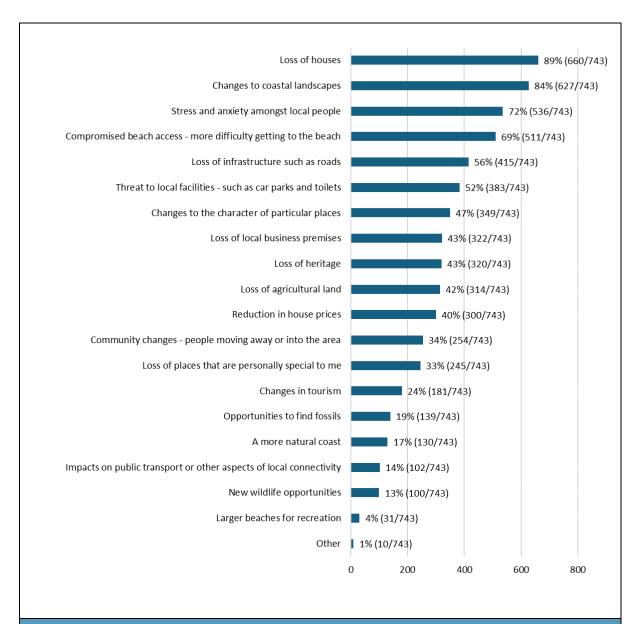


Figure 3-30: Key associations with coastal erosion in North Norfolk (n =743) Source: Study team analysis

The key associations did not change significantly when filtered by NN coast stakeholder nor by length of residence. There were no changes to the top responses when filtered by age except under 18-year-olds who reported community changes and people moving away or into the area as a key association²⁰. There were limited changes when filtered by level of knowledge. The limited changes by filters suggests that there is agreement across different demographic groups and knowledge levels. Overall, the most reported associations tended to be more negative, this is despite the fact that many positive associations and value that the North Norfolk coast provides were cited earlier in the survey in Q2 (see 3.2.2).

Respondents were also given the chance to explain more on their choices. Respondents explained that coastal erosion is devastating for homeowners and the emotional connection to 'homes' rather than 'properties' was also emphasised (4%, 2 out of 55). There was an awareness of changes to coastal landscapes (20%, 11 out of 55) and a concern for the future of this if defences were not put in place

_

²⁰ There were very low responses from the under 18 age category. This was 3 out of 4 responses.

and 11% also highlighted losses of habitats and wildlife (6 out of 55). Safety issues in access to the coastline were raised (4%, 2 out of 55) with one respondent explaining that issues with safety may deter them from enjoying the coast. Stress and anxiety surrounding coastal erosion was also mentioned by respondents (16%, 9 out of 55). There were feelings of distress and calls for help and action on the issue (7%, 4 out of 55).

There were also some comments surrounding the inclusion of positive association with coastal erosion. Some respondents found this upsetting and there was a feeling of a mismatch in prioritisation – "Upsetting that fossils are deemed more important than people!" and a view that this was trying to spin the issue into a positive (10%, 6 out of 55). There were also comments about the framing of moving to a "more natural coast" (5%, 3 out of 55). Respondents explained that 'man' was part of nature and they can influence their environment (4%, 2 out of 55). This may suggest that there is ambiguity over the definition of what a natural coast is or looks like. Others appreciated this inclusion and commented that they had not thought of this (4%, 2 out of 55). Overall, respondents did not provide much detail on the topics that they selected previously but instead expressed their own concerns.

3.3.10 Top Concerns About Coastal Erosion in North Norfolk

Respondents were asked to report their top 5 concerns from a stated list and were also given the option to expand on their answers however there was a low response rate to the open text question (41). The results are presented in Figure 3-31. The top concern was the loss of homes by quite some margin (81%, 490 out of 603). The following concerns were stress and anxiety amongst local people (54%, 323 out of 603), changes to coastal landscapes (43%, 260 out of 603), compromised beach access and more difficulty getting to the beach (39%, 238 out of 603) local of local business premises (30%, 178 out of 603). This was the same when filtered by NN coast stakeholder, except reduction in house prices was reported as the fifth most important option. This is understandable as those living on the North Norfolk Coast will be directly affected by the devaluation of properties, particularly if they live in the risk zone. One respondent explained that if their property is devalued then they will be 'trapped' and another questioned who would want to "buy a property in that position". There were limited changes when filtered by age, location or concern²¹, suggesting that among these demographics there is agreement over the top concerns in the area.

When asked to expand on their answers, respondents emphasised the human impact that the loss of homes has (10%, 4 out of 41). One respondent highlighted that the North Norfolk coast attracts many visitors due to its natural beauty, and its potential disappearance could significantly impact local businesses and tourism. Concerns were also raised about the loss of beach access (7%, 3 out of 41), with many expressing that they would miss visiting the area and using these spaces. Feelings of nostalgia and memories were referenced (7%, 3 out of 41) and there was sadness associated with these areas potentially disappearing.

Additionally, comments reflected the stress and anxiety caused by the uncertainty of the situation (10%, 4 out of 41). It was noted that the most vulnerable and disadvantaged individuals might be disproportionately affected. There were feelings of frustration over the perceived lack of support and worries that no immediate actions were being taken. 20% (8 out of 41) respondents expressed some frustration at the role that authorities are taking and asked for more support and help with the situation. Questions were also raised on why some areas were protected compared to those without defences. It is interesting to note that these some of these concerns, such as role of authorities, were

-

There were changes amongst those who reported low levels of concern however this was a very small sample size and therefore is unreliable to draw any conclusions from.

not provided as options in the multiple-choice part of the survey. This suggests that this might be something that Coastwise wants to look into further to improve trust and relationships with local communities.
Overall, this question provided limited added value in terms of open text responses and there was a low response rate here. However, the top five concerns selected here do reflect the opinions and views expressed elsewhere in the responses to the survey.

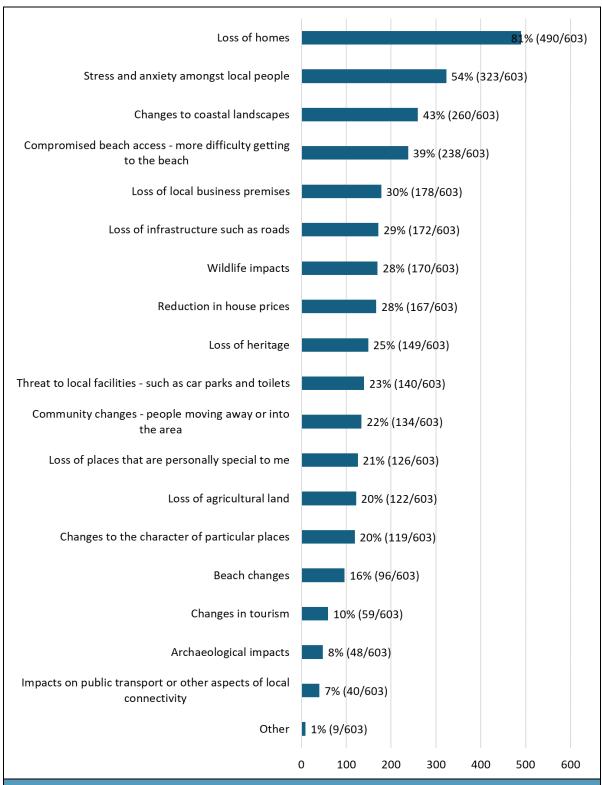


Figure 3-31: Key concerns in North Norfolk (n =603) Source: Study team analysis

3.4 Planning ahead and preparing for coastal erosion

This section includes analysis and discussion of the following questions from the survey:

- Q22: How much responsibility do you think the following have in preparing for coastal erosion in North Norfolk?
- Q23: If you have previously sought information about coastal erosion did you find what you were looking for?
- Q24: I would like to know more about.
- Q25: To what extent do you agree with the following statements?
- Q26: Are you currently involved in any activity related to preparing for coastal erosion in North Norfolk?
- Q27: What might encourage you to get involved in working with others to help develop options to prepare for future coastal erosion?
- Q28: Which of these information sources would you find most helpful?
- Q29: In what ways would you like to participate in developing ideas and options for helping coastal communities prepare for coastal erosion in the future?
- Q33: Is there anything further that you would like to add?

3.4.1 Key Findings

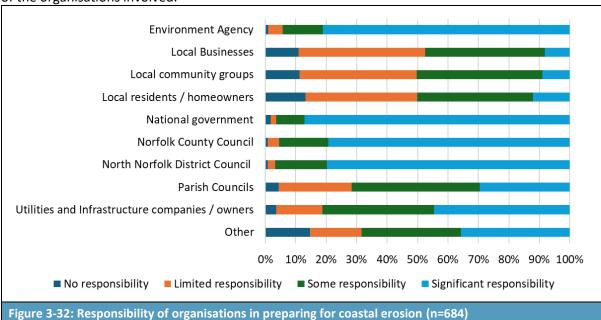
- Government Responsibility in Coastal Erosion Preparation: The majority of
 respondents believe that government groups and authorities bear significant
 responsibility for preparing for coastal erosion, with less responsibility attributed
 to local stakeholders such as residents, community groups, and businesses. This
 perception remained consistent even when filters were applied, indicating a broad
 consensus among respondents. However, a small minority expressed the view that
 everyone shares some level of responsibility in addressing coastal erosion,
 suggesting that while most expect government leadership, some see it as a
 collective effort.
- Challenges in Accessing Information: Many respondents reported difficulties in finding clear, accessible information about coastal erosion and its potential impacts. There is evidence of a strong desire to understand more about how erosion might affect them personally, with respondents actively seeking information.
- Desire for Future Predictions: Respondents expressed a strong desire for more information about the future impacts of coastal erosion. Many sought greater certainty in what is inherently an uncertain situation. This highlights the importance of transparent, data-driven communication to give residents as much clarity as possible about the evolving risks.
- Feelings of Abandonment by Authorities: There was widespread disagreement with statements suggesting adequate preparation for coastal erosion, with many respondents expressing feelings of abandonment and neglect by government authorities at both the national and local levels. This sense of disillusionment reflects a perceived lack of action or support from authorities, fuelling frustration and a lack of trust in existing efforts to address the issue.
- Low Involvement in Erosion Preparedness Activities: The majority of respondents were not actively involved in efforts to prepare for coastal erosion. However, there was evidence that higher levels of concern about erosion were associated with greater involvement, suggesting that those most worried about the issue are more likely to take part in activities aimed at preparation. This correlation indicates that concern may be a driving force for engagement, but there could still be barriers preventing broader participation.
- Motivations and Barriers to Engagement: Respondents indicated that the belief that their efforts "will make a difference" was the strongest motivator for getting involved in developing solutions to prepare for coastal erosion. However, there were also significant negative responses, with some feeling disconnected from decision-making processes. Many respondents expressed frustration, stating that they don't feel listened to by authorities, which contributes to disengagement and a lack of faith in the system. This suggests that improving communication and demonstrating the impact of public involvement could increase participation.

3.4.2 Responsibility of organisations in preparing for coastal erosion

Figure 3-32 presents the distribution of responses when respondents were asked how much responsibility different organisations had in preparing for coastal erosion. It is clear that the majority

of respondents believe that government groups and authorities have significant responsibility in preparing for coastal erosion, with national government being reported as the highest (87%, 579 out of 665), followed by the Environment Agency and the County and District council, all reporting "significant responsibility" around 80%. Local stakeholders such as residents, community groups and businesses were seen to have a lower sense of responsibility.

This question may have been interpreted by respondents as a plea for help, potentially reflecting a belief that authorities hold the primary responsibility for addressing coastal erosion and should be called upon to take action. Across a variety of open text responses, there were consistent feelings of inadequate support from government bodies, with many respondents expressing feelings of abandonment. Local residents and stakeholders may feel powerless to effect meaningful change on their own. When asked if they had any questions related to coastal erosion (Question 15), respondents raised concerns about government policies and sought clarification on the roles and responsibilities of the organisations involved.



Source: Study team analysis

Table 3-10: How much responsibility do you think the following have in preparing for coastal erosion in North Norfolk? (n = 684) Limited Some Significant **Row Labels** No responsibility responsibility responsibility responsibility Environment 1% (7/664) 5% (31/664) 13% (88/664) 81% (538/664) Agency 11% (69/633) 42% (263/633) 39% (249/633) 8% (52/633) **Local Businesses** Local community 11% (72/640) 38% (246/640) 41% (264/640) 9% (58/640) groups Local residents / 13% (86/650) 37% (238/650) 38% (247/650) 12% (79/650) homeowners National 2% (12/665) 2% (12/665) 9% (62/665) 87% (579/665) government **Norfolk County** 1% (6/672) 4% (25/672) 16% (108/672) 79% (533/672) Council

Table 3-10: How mu North Norfolk? (n =	ıch responsibility do y 684)	ou think the following	g have in preparing fo	r coastal erosion in	
Row Labels	No responsibility	ibility Limited Some responsibility responsibility		Significant responsibility	
North Norfolk District Council	1% (5/671)	3% (17/671)	17% (114/671)	80% (535/671)	
Parish Councils	4% (29/656)	24% (157/656)	42% (276/656)	30% (194/656)	
Utilities and Infrastructure companies / owners	4% (23/643)	15% (98/643)	37% (235/643)	45% (287/643)	
Other	15% (14/95)	17% (16/95)	33% (31/95)	36% (34/95)	
Source: Study team analysis					

There are limited changes when filtered by NN coast stakeholder and level of knowledge and awareness of coastal erosion. The results appear to be consistent across different groups and suggest that there is a level of agreement across these filters.

Of those that stated other, the responses varied. A summary of the other responses is provided below:

- Visitors (19%, 9 out of 48)
- Residents (4%, 2 out of 48)
- Educational institutions, universities, academics (10%, 5 out of 48)
- DEFRA and government departments (13%, 6 out of 48)
- Companies, in particular fossil fuel companies (21%, 10 out of 48)
- Farmers (4%, 2 out of 48)
- Other (13%, 6 out of 48)

In the open text responses, there was also an understanding that everyone has some responsibility in preparing for coastal erosion (10%, 5 out of 48). One respondent neatly summarised this as "all stakeholders need to co-create responses to coastal erosion". Other respondents used this to express a negative response (8%, 4 out of 48) expressing feelings that the NNDC was not doing enough or no one was taking any responsibility and as a result no action was occurring.

3.4.3 Access to information on coastal erosion

Figure 3-33 presents the proportion of respondents that sought information about coastal erosion and whether they found what they are looking for or not. The majority of respondents (61%, 587 out of 957) did not answer this question but 28% answered that they did find the information that they were looking for on coastal erosion and 11% reported that they could not find the information that they were looking for.

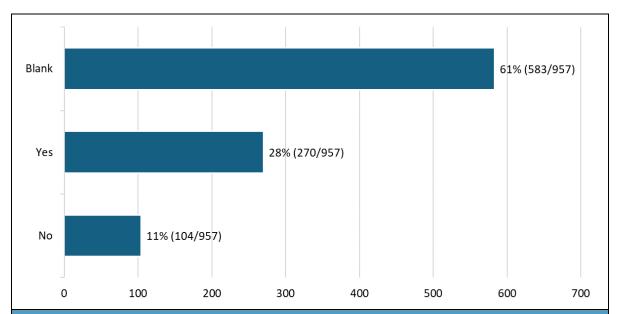


Figure 3-33: If you have previously sought information about coastal erosion did you find what you were looking for? n =957)

Source: Study team analysis

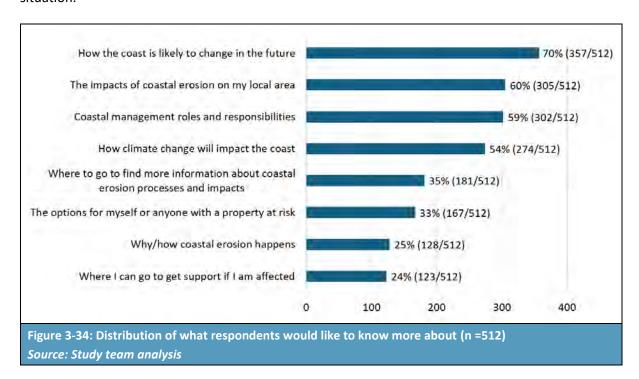
Respondents that answered that they could not find what they were looking for, were provided with the option to explain more. These respondents reported that information was available however it was difficult to understand due to it not being in plain language (8%, 4 out of 51) with one respondent explaining that there was "never a straight answer" and another commenting that the information online was written with "significant spin" or "biased". Challenges related to finding or accessing information that was meant to be publicly available was also reported (12%, 6 out of 51) and there were also cases where respondents were not able to find any relevant information on what they were looking for (18%, 9 out of 51). Additionally, issues surrounding out of date information or information that was limited in scope was also reported (20%, 10 out of 51). There was certainly evidence of respondents trying to find out more information about coastal erosion and what impacts it will have on their lives. Responses were wide ranging and 37% (19 out of 51) were considered off-topic or 'other'. Some of these comments mentioned that respondents looked at the information before making a house purchase (4%, 2 out of 51) and some were more general and mentioned trying to see where areas were being affected and how decisions are made on what areas are given more protection.

It is unknown exactly where respondents were looking for this information, e.g. if this was just an online search or on the Coastwise website. These findings may suggest that there is value in providing a dedicated page that helps answer some of the questions that are arising, especially addressing topics mentioned in section 3.3.4 (Q15). This could be referenced in future Coastwise cafes or communication materials.

Table 3-11: If you have previously sought information about coastal erosion did you find what you were looking for? If you selected no please let us know more. Open text themes (n=51)			
Themes % (n/N)			
Off-topic or Unrelated Responses	33% (17/51)		
Outdated or Limited Scope	24% (12/51)		
No Information Found	18% (9/51)		
Difficult to Access	12% (6/51)		
Complex or Technical Language	8% (4/51)		

Table 3-11: If you have previously sought information about coastal erosion did you find what you were looking for? If you selected no please let us know more. Open text themes (n=51)			
Themes % (n/N)			
Not looked for anything	4% (2/51)		
Community engagement	2% (1/51)		
Source: Study team analysis			

Respondents were also asked what they would like to know more about. This is presented in Figure 3-34. Respondents were most interested in knowing more about future changes to the coast (70%, 357 out of 512) and the impacts of coastal erosion in their area (60%, 305 out of 512). This indicates that respondents were more interested in understanding what might happen in the future and how they will be affected. Reflecting on these results with other sentiments expressed in the open text answers, it is clear that respondents would like to get as much certainty as they can in an uncertain situation.



Respondents were also given the opportunity to expand on other things that they would like to know more about. There were a handful of respondents who had questions surrounding how they could make an impact personally or support (21%, 5 out of 24). The remaining responses were wide ranging and did not justify creating new themes but included questions similar to those highlighted in Q15 which is discussed in section 3.3.4. It is worth nothing that there were very few responses here and there was limited added value in the responses (24). There may be evidence of consultation fatigue here.

3.4.4 Preparing for coastal erosion

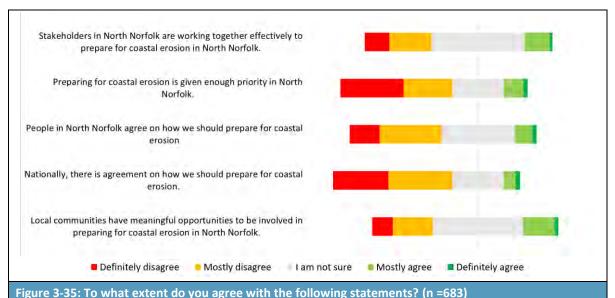
Opinions

Respondents were asked to respond to a range of statements on preparing for coastal erosion in a Likert scale format. This is presented in **Error! Reference source not found.** and the data associated w ith this is presented in Table 3-12. Overall, there was a negative response to these comments, with the majority of respondents reporting that they disagreed with the statements. For the statement

"preparing for coastal erosion is given enough priority in North Norfolk" most respondents across the age categories disagreed with this, indicating that most respondents believe that this should be given higher priority. This is also in line with the responses in the open text questions where respondents explained that it needs to have higher priority²². There was also a high level of disagreement with the statement "Nationally, there is agreement on how we should prepare for coastal erosion". This may indicate that some respondents feel that there is a disconnect between the policy and stance that is coming out of national government and potentially the priority that coastal erosion is given. In the open text responses, there were feelings of abandonment and neglect from national governments raised by stakeholders which is reflected here.

The most positive all of the responses was given to the statement "Local communities have meaningful opportunities to be involved in preparing for coastal erosion in North Norfolk". 19% of respondents reported that they either "definitely" or "mostly" agreed with this statement. This could reflect the work that Coastwise is doing with the workshops that they run with the cafes or engagement activities. However, the majority of respondents are still reporting a negative response or indicating that they are not sure suggesting that connections and communications still need to be made with the local community.

Respondents from Happisburgh, Walcott and Overstrand typically gave more negative responses to all of the statements compared to other locations. It is worth noting that all three of these locations were more represented than other communities when compared to the overall distribution of the population from the Census data. There may be evidence of these location being over-represented here. There were differences amongst respondents from younger age groups but there were too few responses to accurately comment on this. This suggests that there is level of disagreement between age groups however the sample size is too small to reliably provide a conclusion on this.



Source: Study team analysis

.

²² See Question 10 for more detail.

Table 3-12: To what extent do you ag	ree with the foll	owing statemen	ts? (n =683)			
Questions	Definitely agree I a		I am not sure	Mostly disagree	Definitely disagree	
Local communities have meaningful opportunities to be involved in preparing for coastal erosion in North Norfolk.	2%	17%	49%	21%	11%	
	(13/673)	(114/673)	(327/673)	(144/673)	(75/673)	
Nationally, there is agreement on how we should prepare for coastal erosion.	2%	7%	27%	34%	29%	
	(16/676)	(44/676)	(185/676)	(232/676)	(199/676)	
People in North Norfolk agree on how we should prepare for coastal erosion	2%	9%	39%	33%	16%	
	(16/675)	(63/675)	(266/675)	(222/675)	(108/675)	
Preparing for coastal erosion is given enough priority in North Norfolk.	2% (15/676)	11% (72/676)	27% (185/676)	26% (177/676)	34% (227/676)	
Stakeholders in North Norfolk are working together effectively to prepare for coastal erosion in North Norfolk.	1%	13%	50%	22%	13%	
	(9/678)	(91/678)	(337/678)	(151/678)	(90/678)	
Source: Study team analysis		•			•	

Involvement in preparing for coastal erosion

Respondents were asked if they were currently involved in any activity related to preparing for coastal erosion. The majority of respondents (65%, 623 out 957) were not involved in any activity. Of those that were involved, they were mainly located in Happisburgh (32%, 14 out of 44) and Overstrand (18%, 8 out of 44) and were older (45+) (77%, 34 out of 44). They also tended to report higher awareness and knowledge of coastal erosion and were interested in knowing more. Of those that answered yes, they had also exclusively answered "fairly concerned" or "very concerned" indicating that a higher level of concern is associated with an increased level of involvement in preparing for coastal erosion.

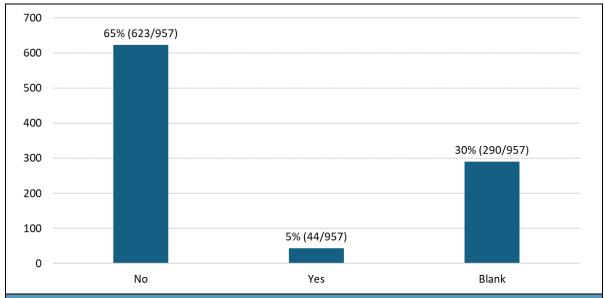


Figure 3-36: Level of involvement in preparing for coastal erosion (n =957) Source: Study team analysis

Table 3-13: Level of involvement in preparing for coastal erosion (n=37)				
Themes	% (n/N)			
Community and residents' group	46% (17/37)			
Other	24% (9/37)			
Coastwise	14% (5/37)			
Parish Council	8% (3/37)			
Flood warden team	5% (2/37)			
Considering moving away/living elsewhere	3% (1/37)			
Source: Study team analysis				

Of those that were involved in preparing for coastal this included being a part of organisational groups. These included: groups such as community and resident groups (46%, 17 out of 37), Parish Councils (8%, 3 out of 37), Flood Warden Teams (5%, 2 out of 37) and Coastwise (14%, 5 out of 37). One respondent mentioned that they were not in groups but were considering moving away or living elsewhere.

Respondents were also asked what might encourage them to get involved to work with others to help develop options to prepare for future coastal erosion. This is presented in Figure 3-37. The most reported answer was "feeling it will make a difference" (53%, 319 out of 597) followed by "knowing more about what options are available..." (41%, 244 out of 597) and "having more time or resources" (35%, 206 out of 597). This did not change when filtered by if the stakeholder had been affected by erosion. Most locations also reported this as the top reason, except Trimingham, West Runton and Weybourne. Though it is worth noting that these locations had small response rates. Respondents under 45 were more likely to cite "having more time or resources" as their top reason, which is understandable given that this age group is typically working and may have less free time.

It is interesting that respondents' most reported answer was "feeling it will make a difference". This may suggest that respondents want to enact change and feel that their actions can change the impacts of coastal erosion. The "Knowing more about what options are available..." statement also reflects comments expressed in the open text responses across the survey where respondents want to know what options are available and what help that they can get to support with coastal erosion. The "having more time or resources" being reported as the third option also suggests that there are more tangible constraints and potential barriers to being involved rather than an enabler of a personal motivating factor.

Respondents were also given the chance to provide an 'other' option. Respondents mainly did not use this as text response to provide an 'other' option but instead used it to express a negative response (38%, 15 out of 40). The responses reflected significant frustration, a summary is provided below:

- Need for Experts: Respondents feel that practical, cost-effective solutions require hands-on experts, not community input;
- Lack of Action: Many believe that discussions are ineffective and only serve as "lip service," with little to no tangible support or action from local authorities;
- Disillusionment: There is a strong sense of disillusionment and mistrust, with respondents feeling ignored or that efforts are merely "tick-box" exercises;
- Calls for Immediate Action: Some expressed anger, calling for immediate action and financial investment, rather than further conversation or planning; and
- Political Distrust: Several respondents mentioned a lack of trust in politicians, feeling they are "self-serving" and disconnected from the needs of the community.

Interestingly a high proportion of those that reported this negative response also stated that government organisations had a "significant responsibility" when preparing for coastal erosion²³. It appears those expressing a negative view on helping develop options feel that it is not their responsibility but the responsibility of authorities to tackle the issue of erosion. Throughout these negative responses there was evidence of potential disconnect as respondents explained that they don't feel listened to by authorities and there is "no point" in being involved in conversations. The majority (87%, 13 out of 15) were NN coast stakeholders and 80% (12 out of 15) reported being affected by erosion, suggesting also that these stakeholders have direct experience with coastal erosion impacts.

Other responses that answered the question and provided methods that would encourage stakeholders to get involved included: being paid to get involved or employment opportunities (4 out of 40), engaging in conversations and groups (8%, 3 out of 40) and a feeling that the government are taking action (5%, 2 out of 40). Respondents also provided reasons why they couldn't get involved which included health challenges, location issues and personal preferences (25%, 10 out of 40).

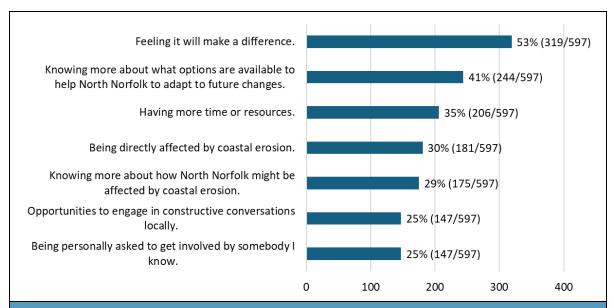


Figure 3-37: Ways to encourage respondents to help be involved in developing options to prepare for future coastal erosion (n =597)

Source: Study team analysis

Respondents were also asked what information sources they would find most helpful. This is presented in Figure 3-38. The most popular response was information boards (47%, 304 out of 646) and on the North Norfolk District Council website (45%, 292 out of 646). This is notable, as many comments throughout the survey emphasised the community's desire for action and clarity on the impacts of coastal erosion (see section 3.4.3). The preference for these resources suggests that respondents want access to information at their own convenience, using materials provided by the council. This also may reflect Q23 where respondents were asked if they were able to find information about coastal erosion. Respondents typically looked online for resources on the impacts of coastal erosion to find out more about action plans and rates of erosion so the preference for this information source format may reflect the information that they are trying to find online. Coastwise events still had a high proportion of respondents indicating that this is a useful information source (22%, 140 out

²³ Environment Agency (11 out of 15); National governments (11 out of 15); Norfolk County Council (11 out of 15); North Norfolk District Council (10 out of 15).

of 646). Interestingly one respondent commented under Q23 that they did not find the information they were looking for until they attended a Coastwise event, suggesting the value that these provide.

For under 24-year-olds, online-based information sources proved to be more popular. Older age groups had similar results to the baseline²⁴. The differences in age suggest that different formats are better for different age groups however the low sample size for certain age groups does not make this a concrete conclusion.

Respondents were also asked to tell the team more about this. There were limited responses to this question (27). Some respondents used this as opportunity to submit a negative response (22%, 6 out of 27) and there were a range of 'other' responses. They are summarised below:

- Freedom of Information requests, the internet, and schools communicating with parents;
- Seeking unbiased information from reputable national sources, such as local TV, nature programs, and national radio;
- Involvement of experts and scientific groups to manage and slow erosion;
- Suggestions for increased national attention, better communication, and substantial community engagement;
- Local events and improvements in information dissemination through national websites and media outlets; and
- Calls for learning from what other regions or countries have done to manage coastal erosion effectively.

_

²⁴ Older age groups made up a the majority of the overall results so there are limited changes here.

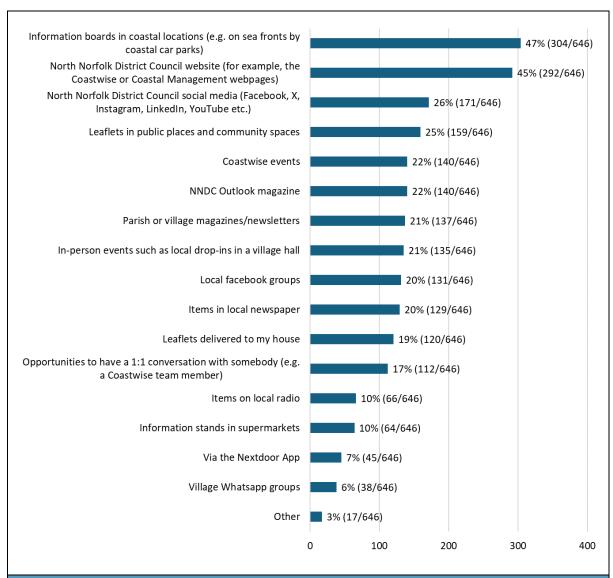


Figure 3-38: Most useful information sources (n=646) Source: Study team analysis

Respondents were also asked in what ways they would like to participate in developing ideas and options for helping coastal communities prepare for coastal erosion in the future. This is presented in Figure 3-39. The most popular response was "filling in future surveys" (57%, 322 out of 561) which is promising as this could be a future method of gathering data and being able to fill information gaps or explore themes identified from the survey further. Unfortunately, respondents indicating they were not interested in participating was the second highest response (22%, 122 out of 561). This may reflect the responses mentioned under Q27²⁵ where the negative responses explained that they did not want to be involved or felt being involved would make no difference and the responsibility and actions lay with government authorities. 13% (2 out of 15) of this group said that they would not be interested in participating whilst 20% (3 out of 15) explained using the 'other' category explaining a similar sentiment with one respondent reporting "We don't want to prepare for coastal erosion, we want to stop it". There were no notable differences when filtered by NN coast stakeholder.

_

²⁵ Q27: What might encourage you to get involved in working with others to help develop options to prepare for future coastal erosion?

Responses to the 'other' category provided a range of responses, this included:

- Community Advocacy: Some respondents expressed a desire to become "community connectors," advocating for coastal protection, raising awareness, and supporting resettlement initiatives for affected communities (13%, 4 out of 30);
- Learning Opportunities: Attending events and meetings to learn more about coastal erosion was seen as a valuable way for respondents to engage with the issue. (13%, 4 out of 30);
- Opposition to Engagement: Some respondents voiced frustration, preferring to focus on stopping coastal erosion entirely rather than participating in initiatives that seek solutions or require involvement before protection measures are in place (10%, 3 out of 30); and
- Barriers to Participation: Several respondents noted difficulties in engaging due to factors such
 as age, learning disabilities, or geographic distance from the affected areas (13%, 4 out of 30).
 The study team considered if there were trends here with age or geographic distance
 associated with certain demographics but there were not enough responses to make a reliable
 conclusion.

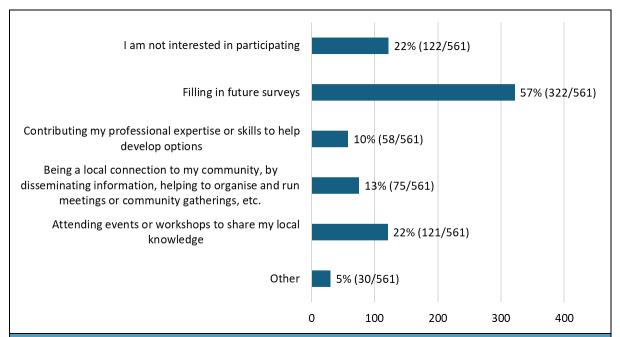


Figure 3-39: Ways respondents would like to participate in developing ideas and options for helping coastal communities prepare for coastal erosion in the future (n =561)

Source: Study team analysis

3.4.5 Further comments

At the end of the questionnaire, respondents were asked if they had any further comments. These responses were coded and themed. Most respondents reported "no" or their responses was not relevant (35%, 42 out of 119). Some respondents did use this opportunity to express a negative response (8%, 9 out of 119). These comments did not provide any added value but expressed further frustration on the issue. These were often combined with comments on the responses to coastal erosion such as the need for action, comments on current measures as well as policy suggestions to combat erosion (20%, 24 out of 119). The majority of responses under this theme included calls to save the area with a no matter what approach. One respondent mentioned that "all monies should be spent however much" and another commented that there should be action now rather than efforts be involved in consultation activities.

Perceptions of authorities was also an identified theme in this question (13%, 15 out of 119). Responses included the level of trust or distrust in authorities handling this issue as well as criticism of responses from authorities however there were calls from respondents for authorities to engage with local communities on this issue (2%, 2 out of 119). Respondents also used this question as an opportunity to comment on their own personal experiences (12%, 14 out of 119) and concerns about erosion (6%, 7 out of 119). No new themes were identified here and there is evidence of stakeholder fatigue as less respondents answered this open text question compared to the others earlier in the questionnaire. Overall, respondents emphasised the level of urgency of the situation and expressed a desire for change and action.

4 Limitations

4.1 Question 19 Wellbeing

The wellbeing question asked in the survey was phrased in a potentially confusing way due to its two-part structure, see Figure 4-1. The question asks to what extent overall personal wellbeing is affected by coastal erosion and also asks respondents to rate this on a scale of 1-10 which is typically used as a measure of actual wellbeing. These two components merge different types of questions, potentially leading to varied interpretations. Multiple respondents in the survey mentioned that they found this question confusing and found the scale difficult to answer the question (6%, 9 out of 161).

In addition, the scale that was used in this question was not in equal proportions. A scale for a question like this requires a balanced scale (e.g. from 0 to 10) so that there is a clear mid-point (e.g. 5). The scale used in the questionnaire was from 1 to 10 and provided an imbalanced scale (e.g. a mid-point of 5.5). To demonstrate the effect of this, the diagram below shows can either assume that there are 4 neutral points in which case the mid-point is 5.5 which was not an option for respondents to give (option 1). Alternatively, if it is agreed that 5 is the mid-point then there are 5 negative values compared with 4 positive values, creating an unbalanced scale (option 2).

Table 4-1	Table 4-1: Wellbeing scale interpretation									
Score	1	2	3	4	5	6	7	8	9	10
Option 1	Positive	Positive	Positive	Neutral /positive	Neutral 5	Neutral 5	Neutral /negative	Negative	Negative	Negative
Option 2		Pos	itive		Neutral			Negative		

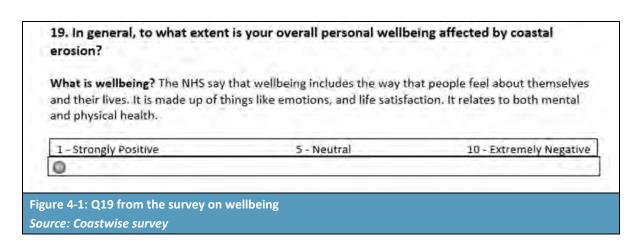


Figure 4-2 presents the count of responses received to Q19 for the scores and also for the explanation responses. Slightly more responses were received for more negative impact scores. It was very important for the study team to look at the response patterns and the explanations associated with this as allowed the team to understand how these respondents interpreted the scores. Respondents who scored 5-10 often noted that coastal erosion has an extremely negative impact on their wellbeing. Those who scored 1-5 generally mentioned good mental health, often indicating they were less affected by coastal erosion. Respondents with lower scores (1-5) typically did not discuss coastal

erosion or mentioned living further from the coast, indicating minimal impact. Notably, no respondents indicated that coastal erosion had a strongly positive effect on their wellbeing.

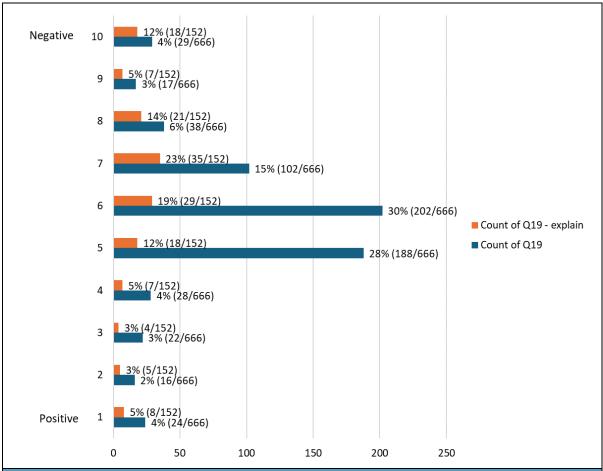


Figure 4-2: Count of values and explanation responses to Q19 (n=152/666) Source: Study team analysis

It is important to interpret the data for this question with caution, as there were varied interpretations, and some respondents may not have fully understood the question, particularly those who did not provide explanations. This question has been included in the analysis of the report because it was identified by the Coastwise team that there are sizeable data gaps associated with this topic. However, any external use of this data should reference the limitations outlined in this section.

4.2 Baselining

It is important to note that a true baseline cannot be achieved without prior funding to a project, so all results presented here are biased by the announcement of Coastwise. This means not all benefits can truly be captured across the lifetime of the Coastwise project. However, the data presented in this report can be used to compare against to reflect on views and opinions at this point in time.

4.3 Respondent bias

It is important to note that the respondents for this question were part of a self-selected sample. Those directly impacted by coastal erosion had a vested interest in participating, which likely

contributed to the high number of respondents reporting elevated awareness and concern about the issue.

The survey data was also not representative of the wider population, as discussed in section 3.1. Demographically, the survey was skewed, with a large number of participants aged 55 and older, making it difficult to draw substantial conclusions from younger age groups due to their low response rate. There were also a large number of responses from certain locations resulting in these locations sometimes dominating the responses.

Throughout the survey responses, feelings of abandonment, distress, and despair were prevalent, highlighting the deep concern many have about coastal erosion. Some evidence suggests that respondents may have used the survey as a plea for help, potentially leading to emotionally charged, rather than balanced, responses.

5 Recommendations

5.1 Recommendations for future work

5.1.1 Wellbeing

It is recommended that future work focuses on the connection between wellbeing and the coastal environment. This is particularly important from both a positive impact on wellbeing and a negative impact.

Stress and anxiety from coastal erosion was an impact that was prevalent throughout the responses. Safety issues from erosion such as unstable cliffs and inaccessible beaches was mentioned to have a negative impact on wellbeing as this prevented stakeholders from being able to use these outdoor spaces. The constant worry and anxieties around losing homes and properties was a major factor in contributing to poor wellbeing and this was highlighted across responses to the survey, not just in the wellbeing question.

From a positive perspective, there are many benefits to wellbeing and human health from exposure to the marine and coastal environment. Throughout the responses to this survey there was a clear understanding of the benefits that the coast can provide to people's physical and mental health and there is evidence in the literature to suggest that living near or visiting the coastal environment affects human health and well-being²⁶. Additionally, coastal management strategies, such as "rollback" policies or the installation of coastal defences, can indirectly improve well-being by providing a sense of security and creating a more stable living environment.

During the workshop, the Coastwise team stressed that data on well-being is significantly limited in this area, and any insights on this topic would help address existing gaps. This survey has provided clear evidence of the coast's impact on well-being, highlighting the need for further investigation.

5.1.2 Engagement with young people

This survey saw a low response rate from younger age groups, raising the concern that the perspectives of this demographic are underrepresented. Given that coastal erosion will affect many future generations, understanding the viewpoints of younger people is crucial for long-term planning. Capturing their insights would provide valuable input into how different generations perceive the risks and challenges posed by coastal erosion.

It would also be important to explore generational differences in attitudes toward the region's plans and preparations for coastal erosion. Younger generations may bring fresh ideas or a different way of thinking and understanding their level of interest in becoming involved in mitigation efforts could shape future engagement strategies. Gaining their perspective could also shed light on whether they feel empowered or concerned about the future impacts, helping ensure that preparation and response efforts are adaptive and forward-looking.

It is unknown whether this low response rate was due to younger people being unaware of the survey and improvements in publicity and dissemination were required or if these people were disinterested

-

Defra (2019) Evidence Statement 07: The well-being and human health benefits of exposure to the marine and coastal environment. Available at: https://www.smmr.org.uk/wp-content/uploads/2020/07/SD1712 well-being-and-human-health-benefits.pdf. Accessed September 2024.

in responding to the survey. Interviews or focus groups with younger people may be beneficial here to understand if there are barriers in connecting with this demographic or if there needs to be improvements in enabling them to provide their views and opinions. As mentioned in section 3.1, there is an older demographic in North Norfolk which may have contributed to this, but there are still too few responses from younger age groups to produce reliable information.

5.2 Recommendations for survey design

5.2.1 Single choice vs multiple choice

There are some instances where questions that should be coded as single choice questions have been coded as multiple-choice questions. Examples of this included length of residence where respondents were able to select multiple options, e.g. in some instances respondents selected that they had lived in the area for 2 - 5 years and 16 - 20 years. This has resulted in inaccurate data in some instances. Unfortunately, this data had to be removed. Future surveys should include this type of data as a single choice option to make data cleaning smoother and improve the quality of the data.

5.2.2 Reducing consultation fatigue

Capping the length of the questionnaire

The length of future questionnaire should be considered to minimise the impact of consultation fatigue. Long questionnaires result in respondents 'switching off' and the chances of poor or biased responses increases as respondents rush through to the end. There was evidence of this in this survey. Respondents provided far less detailed and high-quality answers from Q20 onwards compared to open text responses earlier in the questionnaire. In addition, more negative and frustrated comments were also more common in later questions. It is recommended that questionnaires take no longer than 20 minutes to complete.

Use of routing through the questionnaire

It is recommended that in future surveys routing is used. This avoids the need for more data cleaning later in the project and can make the survey shorter for respondents where the question is not applicable, reducing consultation fatigue and confusion among respondents. For example, in $Q6^{27}$ a lot of respondents provided n/a to the question around businesses and in $Q26^{28}$ there were instances where the respondents selected no but then answered the question "if yes, please explain further".

5.2.3 Questions on wellbeing

Wellbeing is particularly important when looking at coastal erosion as it can cause serious stress and anxiety to those affected. The question asked to what extent overall personal wellbeing is affected by coastal erosion and also asks respondents to rate this on a scale of 1-10 which is typically used as a measure of actual wellbeing. These two components merge different types of questions, potentially leading to varied interpretations²⁹.

²⁷ Which coastal settlement(s) does your business operate in or closest to? Select all that apply

Are you currently involved in any activity related to preparing for coastal erosion in North Norfolk? If yes, please tell us what you are involved in?

²⁹ See the limitations section for more information.

19. In general, to what extent is your overall personal wellbeing affected by coastal erosion?

What is wellbeing? The NHS say that wellbeing includes the way that people feel about themselves and their lives. It is made up of things like emotions, and life satisfaction. It relates to both mental and physical health.

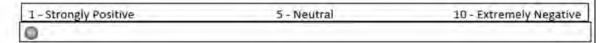


Figure 5-1: Q19 from the survey on wellbeing Source: Coastwise Survey

It is important to consider wellbeing in future questionnaires or surveys because it is clear from the responses that coastal erosion has a significant impact on communities' wellbeing. The Office for National Statistics use four survey questions that aim to measure personal wellbeing called the ONS4³⁰. This is shown in Table 5-1. This is an important measure to monitoring people's quality of life especially with changes in circumstances and can also be used in cost-benefit analysis.

Table 5-1: Four measures of personal wellbeing				
Measure	Question			
Life satisfaction	Overall, how satisfied are you with your life nowadays?			
Worthwhile	Overall, to what extent do you feel that the things you do in your life are worthwhile?			
Happiness	Overall, how happy did you feel yesterday?			
Anxiety	On a scale where 0 is "not at all anxious" and 10 is "completely anxious", overall, how anxious did you feel yesterday?			

Note: Respondents are asked to give an answer on a scale of 0 to 10, where 0 is "not at all" and 10 is "completely".

Source: Office for National Statistics (2018) Surveys using our four personal wellbeing questions. Available

https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/surveysusingthe4office fornationalstatisticspersonalwellbeingquestions. Accessed September 2024.

Future questions should ask about the respondent's wellbeing at that current point in time using the measures in Table 5-1 followed by a separate question asking to what extent coastal erosion impacts their overall personal well-being. This approach would provide both a baseline measure of well-being and a clearer understanding of coastal erosion's specific influence on it, allowing for future comparisons.

personal information the wellbeing found here: on questions can he https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingsur veyuserguide

6 Conclusions

The survey results underscore that coastal erosion is a critical concern for coastal communities, cutting across demographics and locations. Coastal erosion affects multiple facets of life—where people live, work, and holiday—and its impacts intersect with a range of policy areas. The survey responses highlighted the profound impact of erosion on lives and communities, with visible changes to landscapes intensifying awareness and concern.

While awareness of erosion is high, level of knowledge is lower. Many respondents described their understanding as influenced by personal experience (68%) and media coverage (47%) rather than indepth or technical information, suggesting overall low coastal literacy. This presents a challenge for engagement efforts, as Coastwise must navigate preexisting narratives when providing educational resources.

The survey also revealed significant stress and anxiety stemming from erosion concerns. Respondents expressed frustration over perceived inaction by authorities, which has intensified feelings of vulnerability among those facing imminent erosion risks. However, the coast's importance for mental health, recreation, and physical well-being was also clear, highlighting its dual role as both a source of concern and a valuable community resource.

Dissatisfaction with current approaches to coastal erosion was pervasive, with strong calls for prioritising and expanding efforts to address the issue. Many respondents were critical of authorities' responses and doubted the adequacy of current preparedness measures, pointing to a need for more proactive planning and support and sharing this with the local community.

A recurring theme throughout the survey was the importance of prioritising people and communities in erosion policy and actions. Emphasising support for affected individuals rather than focusing solely on erosion's physical effects could improve community buy-in for Coastwise's initiatives, aligning efforts more closely with the needs and values of local stakeholders.

Annex 1 Traceability document

A1.1 Question 1

For those that stated other (please specify) but the response could be added into an existing category then this was added and labelled in orange. If the category was not already selected then this has been added in orange and the 'other specify' comment has also been coloured orange.

This was a multiple-choice question and in order to use this in the analysis a new binary variable called NN coast stakeholder has been added. This has been split in the following way:

NN Coast Stakeholder	(blank)
I live close to the North Norfolk coast between Weybourne and Happisburgh I own a business on the North Norfolk coast between Weybourne and Happisburgh (includes holiday rental home ownership)	 I live elsewhere in the North Norfolk District I am a regular visitor to the North Norfolk Coast between Weybourne and Happisburgh (for work, leisure, visiting friends or family) I have a second home for private use in a coastal town or village in North Norfolk between Weybourne and Happisburgh
	 Other (please specify)

A1.2 Question 3

For the other responses a new category was not defined as there were too few answers. The answers are grouped as other and are coloured yellow.

A1.3 Question 4

Non-sensical answers have been removed and coloured in grey. The original answers have been included in comment boxes. Non-sensical answers included when respondents selected multiple options for length of residence which is not possible.

A1.4 Question 6

Any non-sensical answers were removed. Many respondents answered 'n/a' or 'no' – these were all removed. Those that were genuine answers categorised into other, there were too few responses to justify a new category. These were coloured in grey and the original answers were added in comment boxes. Any answers that could be categorised into existing category were moved.

A1.5 Question 9

For the other responses a new category was not defined as there were too few answers. The answers are grouped as other and are coloured yellow. Non-sensical answers have been removed and coloured in grey. The original answers have been included in comment boxes.

A1.6 Question 10

For the other responses a new category was not defined as there were too few answers. The answers are grouped as other and are coloured yellow. Non-sensical answers have been removed and coloured in grey. The original answers have been included in comment boxes. Anything that was relevant from the "other" category that might be relevant has been copied over and coloured pink.

A1.7 Question 13

For those that stated other (please specify) but the response could be added into an existing category then this was added and labelled in orange. If the category was not already selected then this has been added in orange and the 'other specify' comment has also been coloured orange. For the other responses a new category was not defined as there were too few answers. The answers are grouped as other and are coloured yellow.

A1.8 Question 17

A new variable – affected by erosion has been created. This has been split in the following way:

Affected by erosion	(blank)
 I/my household is or has been affected by coastal erosion Somebody I know/a relative is or has been affected by coastal erosion My business or workplace is or has been affected by coastal erosion My community is affected Other 	I am not affected

A1.9 Question 20

Non-sensical answers have been removed and coloured in grey.

A1.10 Question 21

For those that stated other (please specify) but the response could be added into an existing category then this was added and labelled in orange. If the category was not already selected then this has been added in orange and the 'other specify' comment has also been coloured orange.

A1.11 Question 26

Non-sensical answers have been removed and coloured in grey. The original answers have been included in comment boxes.

A1.12 Question 29

For the other responses a new category was not defined as there were too few answers. The answers are grouped as other and are coloured yellow.

A1.13 Question 32

/\1.1 5	Question 32
category. 5 new that said they w	ed in the survey as open text. It is suggested in the future that this is a single choice categories were defined: employed/retired/student/unemployed/volunteer. Those ere housewife/disabled were categorised as unemployed. Self-employed/part time ed as employed.

Annex 2	Coding library
	nework and library has been designed to keep track of all of the codes and themes ified in the qualitative responses from the Coastwise survey.
This can be four	nd in the file Annex 2 Coding library.xlxs

Annex 3 Coastwise Survey

SECTION A

This section asks a few questions that will help the Coastwise project understand people's relationship with the coast.

1. What is your relationship to the North Norfolk coast? (please tick all that apply)
☐ I live close to the North Norfolk coast between Weybourne and Happisburgh ☐ I live elsewhere in the North Norfolk District ☐ I own a business on the North Norfolk coast between Weybourne and Happisburgh (includes holiday rental home ownership) ☐ I am a regular visitor to the North Norfolk Coast between Weybourne and Happisburgh (for work, leisure, visiting friends or family) ☐ I have a second home for private use in a coastal town or village in North Norfolk between Weybourne and Happisburgh ☐ Other (please specify)
2. What do you value most about the North Norfolk coast? This can be in general or relate to particular special places.
If you live or own a business on the North Norfolk coast between Weybourne and Happisburgh, please answer the questions here that are relevant to you, otherwise you can move to the next page. If you live on the North Norfolk coast between Weybourne and Happisburgh:
3. Which coastal settlement is your home in or closest to? Weybourne Sheringham East Runton West Runton Cromer Overstrand Sidestrand Trimingham Mundesley Bacton Walcott Happisburgh Other (please specify)

4. How long have you lived there?
 ☐ 1 year or less ☐ 2 - 5 years ☐ 6 - 10 years ☐ 11 - 15 years ☐ 16 - 20 years ☐ 20+ years
5. Do you live in the coastal erosion risk zone?
☐ Yes ☐ No ☐ I don't know
If you <u>own a business</u> on the North Norfolk coast between Weybourne and Happisburgh:
6. Which coastal settlement(s) does your business operate in or closest to? Select all that apply.
Weybourne Sheringham East Runton West Runton Cromer Overstrand Sidestrand Trimingham Mundesley Bacton Walcott Happisburgh Other (please specify)
7. How long have you owned/operated a business on the coast?
 1 year or less 2 - 5 years 6 - 10 years

☐ 11 - 15 years ☐ 16 - 20 years ☐ 20+ years
8. Is your business premises located in the coastal erosion risk zone?
☐ Yes ☐ No ☐ I don't know
9. Which sector does your business relate to?
□ Building/construction and related trades (e.g. electrician, plumber) □ Care sector □ Education □ Hospitality □ Holiday Parks □ Other visitor accommodation □ Infrastructure/Utilities □ Local amenities (e.g. shops) □ Local government □ Other (please specify)
SECTION B This section includes questions that will help Coastwise to understand people's awareness, knowledge and concerns about coastal erosion. 10. What do you think are the top three priorities for North Norfolk coastal communities between Weybourne and Happisburgh in the next 5 years?
The options are listed in alphabetical order.
Affordable homes Climate change Coastal erosion Energy efficiency in homes Facilities for young people Flood risk Health and social care Local jobs Parking facilities Public transport Schools and education The natural environment
☐ Tourism

Other (please specify)
Please tell us more about your choice of priorities if you wish.
11. How would you rate your awareness of coastal erosion in North Norfolk?
 Very aware Aware Somewhat aware Not very aware Not at all aware
12. How would you rate your level of knowledge about coastal erosion processes (e.g. how and why it happens)
 No knowledge/I don't know anything about it Minimal knowledge Basic knowledge Adequate knowledge Very knowledgeable/I know a lot about it
13. What are the main sources of your knowledge about coastal erosion in North Norfolk? Please click up to five.
Arts Conversations with others The Coastwise project (webpage, events, etc.) District Council website District Council - other (print, events etc.) Educational resources (via school or college) Government websites (aside from North Norfolk District Council) My own observations News media (online) News media (print) News media (fradio) Professional expertise / training Scientific research articles Social media TV documentaries Other (please specify)
14. How interested are you in knowing more about coastal erosion?Very interested

☐ Quite interested ☐ Neither interested nor disinterested ☐ Not so interested ☐ Not at all interested
15. Are there any particular questions concerning coastal erosion that you would like to know the answers to?
16. How would you describe your general level of concern about coastal erosion in North Norfolk?
 Very concerned Fairly concerned Slightly concerned - I am aware of it Not really concerned Not at all concerned Please tell us more if you would like to
17. Have you, or someone you know, been affected by erosion, and how? Tick all that apply.
☐ I am not affected ☐ I/my household is or has been affected by coastal erosion ☐ Somebody I know/a relative is or has been affected by coastal erosion ☐ My business or workplace is or has been affected by coastal erosion ☐ My community is affected ☐ Other
If possible, please give us some examples of how you, others or your community are affected:
18. Have you at any point sought support because of being affected by coastal erosion?
☐ Yes ☐ No
Please explain a little more if you are willing:

19. In general, to what extent is your overall personal wellbeing affected by coastal erosion?

What is wellbeing? The NHS say that wellbeing includes the way that people feel about themselves and their lives. It is made up of things like emotions, and life satisfaction. It relates to both mental and physical health.

1 - Strongly Positive 5 - Neutral 10 - Extreme		
0		
Please tell us more about this if you 20. Which of the following of Tick as many as you wish		al erosion in North Norfolk?
□ Loss of houses □ New wildlife opportunities □ Loss of local business premise □ Changes to coastal landscapes □ Compromised beach access – □ Opportunities to find fossils □ Reduction in house prices □ Loss of infrastructure such as r □ Larger beaches for recreation □ Community changes – people r □ Threat to local facilities – such □ Changes in tourism □ Stress and anxiety amongst local coastal	more difficulty getting to the beach oads moving away or into the area as car parks and toilets cal people rticular places other aspects of local connectivity	
Please tell us more about this if you		
21. If you are somebody who fee five most important from this list		coastal erosion, please tick the
Please add anything that is missing	g in the comments box.	
If you do not feel concerned or wor	ried, skip to the next question.	

	Loss of homes							
=	☐ Wildlife impacts							
_	Loss of local busines	ss premises						
	☐ Changes to coastal landscapes							
	Compromised beach	n access – more	difficulty getting	g to the beach				
	Archaeological impa	cts		_				
	Reduction in house p	orices						
	Loss of infrastructure	e such as roads						
	Beach changes							
	Community changes	– people movir	ng away or into	the area				
	Threat to local faciliti	es – such as ca	ar parks and toil	ets				
	Changes in tourism							
	Stress and anxiety a	mongst local pe	eople					
=	Loss of heritage							
Ц	Changes to the char	•	•					
	Impacts on public tra	-	aspects of loca	connectivity				
=	Loss of agricultural la		agaigl to ma					
	Loss of places that a I am not concerned a							
=	Other (please specify	•	se unings					
ш	Other (please specif	y <i>)</i>						
If v	ou would like to, ple	ease tell us mo	ore about thes	e concerns				
,	ou would into to, pit	odoo ton do m		0 0011001110.				
So	ection C - Planr	nina ahaad	and nrena	aring for co	astal arnsi	on		
56		iiig aileau	and prepa	aring for cc	astai ei osi	OII		
22.	How much respons	sibility do you t	think the follow	ing have in pre	eparing for coa	stal erosion		
	North Norfolk?	manney de year		g p	opag .o. ooa	o		
The	list is in alphabetica	l order.						
			1.1. 11. 1	6	01			
		No	Limited	Some	Significant	Don't know		
Env	rironment Agency	responsibility	responsibility	responsibility	responsibility			
	al Businesses							
	al community							
gro	•							
	al residents /							
	neowners							
	ional government		Ц	Ц	Ц			
	folk County Council							
Cou	th Norfolk District							
	incii							
	ıncıı ish Councils							

Litilities and	No responsibility	Limited responsibili	Some y responsibility	Significant responsibility	Don't know		
Utilities and Infrastructure companies / owners							
Other(s)							
If you selected 'Other' ple	ease indicate	who this refers	to.				
23. If you have previou find what you were loo		formation abo	out coastal erosi	on in your local	area, did you		
Yes No							
If you selected no, pleas	e let us know	more.					
24. I would like to know more about: Please tick all the statements that apply to you. Why/how coastal erosion happens How the coast is likely to change in the future The impacts of coastal erosion on my local area The options for myself or anyone with a property at risk How climate change will impact the coast Where to go to find more information about coastal erosion processes and impacts Where I can go to get support if I am affected Coastal management roles and responsibilities Please let us know any other things you would like to know more about.							
25. To what extent do you agree with the following statements?							
Otaliahaldan in North N	di	•	lostly I am no sagree sure	ot Mostly agree	Definitely agree		
Stakeholders in North Noworking together effective prepare for coastal erosi North Norfolk.	ely to		o o				
Local communities have meaningful opportunities involved in preparing for erosion in North Norfolk.							

Development New York	Definitely disagree	Mostly disagree	I am not sure	Mostly agree	Definitely agree			
People in North Norfolk agree on how we should prepare for coastal erosion. Nationally, there is agreement on how we should prepare for coastal erosion.								
Preparing for coastal erosion is given enough priority in North Norfolk. Owners of assets (e.g. utilities,								
infrastructure, local facilities) in North Norfolk's erosion risk zone are prepared and have relevant management plans in place for these.								
26. Are you currently involved in any activity related to preparing for coastal erosion in North Norfolk?								
☐ Yes ☐ No								
If yes, please tell us what you are involved in.								
27. What might encourage you to get involved in working with others to help develop options to prepare for future coastal erosion?								
 □ Being personally asked to get involved by somebody I know. □ Being directly affected by coastal erosion. □ Having more time or resources. □ Knowing more about how North Norfolk might be affected by coastal erosion. □ Knowing more about what options are available to help North Norfolk to adapt to future changes. □ Opportunities to engage in constructive conversations locally. □ Feeling it will make a difference. □ Other (please tell us more about this) 								
28. In general, which of these information sources would you find most helpful?-Tick up to three.								
 □ North Norfolk District Council website (for example, the Coastwise or Coastal Management webpages) □ North Norfolk District Council social media (Facebook, X, Instagram, LinkedIn, YouTube etc.) 								
 ☐ Leaflets in public places and community spaces ☐ Information stands in supermarkets ☐ Opportunities to have a 1:1 conversation with somebody (e.g. a Coastwise team member) 								

☐ Information boards in coastal locations (e.g. on sea fronts by coastal car parks) ☐ Items in local newspaper ☐ Items on local radio ☐ Parish or village magazines/newsletters ☐ Local facebook groups ☐ Village Whatsapp groups ☐ Via the Nextdoor App ☐ In-person events such as local drop-ins in a village hall ☐ Leaflets delivered to my house ☐ NNDC Outlook magazine ☐ Coastwise events ☐ Other (please specify)
29. In what ways would you like to participate in developing ideas and options for helping coastal communities prepare for coastal erosion in the future?
Attending events or workshops to share my local knowledge Contributing my professional expertise or skills to help develop options Being a local connection to my community, by disseminating information, helping to organise and run meetings or community gatherings, etc. Filling in future surveys Other (please specify)
☐ I am not interested in participating
SECTION D In these last questions, we ask a few basic questions about you to understand more about who has completed the surveys. These aren't mandatory for you to answer but will help us understand our data better.
30. What is your age category?
□ Under 18 □ 18-24 □ 25-34 □ 35-44 □ 45-54 □ 55-64 □ 65+
31. What is your gender?
 Male (including transgender male) Female (including transgender female) Non-binary Prefer not to say

32. What is your employment status/occupation						
33. Is there anything else you would like to add?						



Risk & Policy Analysts Limited Suite C, 2nd floor, The Atrium, St Georges Street Norwich, Norfolk, NR3 1AB, United Kingdom

> Tel: +44 1603 558442 E-mail: post@rpaltd.co.uk Website: www.rpaltd.co.uk

If printed by RPA, this report is published on 100% recycled paper