



RESEARCH PROPOSAL: EXPLORING LOCAL AUTHORITY PRACTITIONERS' PERCEPTIONS AND ATTITUDES TOWARDS NATURAL FLOOD MANAGEMENT.

*A Research Proposal for the Master's
Dissertation of the Perspectives of Local
Authority Practitioners towards Natural Flood*

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CHAPTER 1:

1.1 INTRODUCTION:

Climate change, the long-term shift in temperature and weather patterns, is becoming a common term worldwide, with many shifts leading to widespread and adverse impacts (Met Office, 2019; IPCC, 2023). In the UK alone, the changing climate, accompanied by rapid urbanisation, have led to observable seasonal shifts towards milder, wetter winters and hotter, drier summers (Met Office, 2019; Kendon *et al.*, 2023; Wang *et al.*, 2022), with the potential to un-sync many ecosystem functions and services.

These overall weather patterns have also increased the frequency and intensity of flooding, with exceptional and widespread flooding events observed in recent years (IPCC, 2023). The late floods of 2019 and early 2020 (Figures 1 and 2) alone saw over 6000 properties flooded, equating to over £300 million worth of damages (Sefton *et al.*, 2021; Carvalho and Spatani, 2023). With figures from Natural Resources Wales estimating 245,118 properties in Wales are at risk of flooding as of 2023 – a figure expected to rise significantly over the next few decades – these patterns and impacts underline the need for effective flood risk management (NRW, 2023).



Figures 1 and 2: Images of damage in Pontypridd Town Centre and Pentre after Storm Ciara and Dennis in 2019 and 2020 (Welsh Government, 2020).

Trends in flood risk management are emerging, showing an increased enthusiasm for softer, more resilient approaches to flood mitigation (Connelly *et al.*, 2023; Morrison, Westbrook, and Noble, 2018). Although conventional hard measures are still prioritised, measures such as natural flood management (NFM) and nature-based solutions (NBS) are being pushed as solutions (Hill *et al.*, 2023), seen in Figure 3. These approaches focus on utilising and mimicking natural processes to reduce flood risk and provide other environmental benefits; therefore, they are regarded as more sustainable and climate-resilient than traditional grey infrastructure.

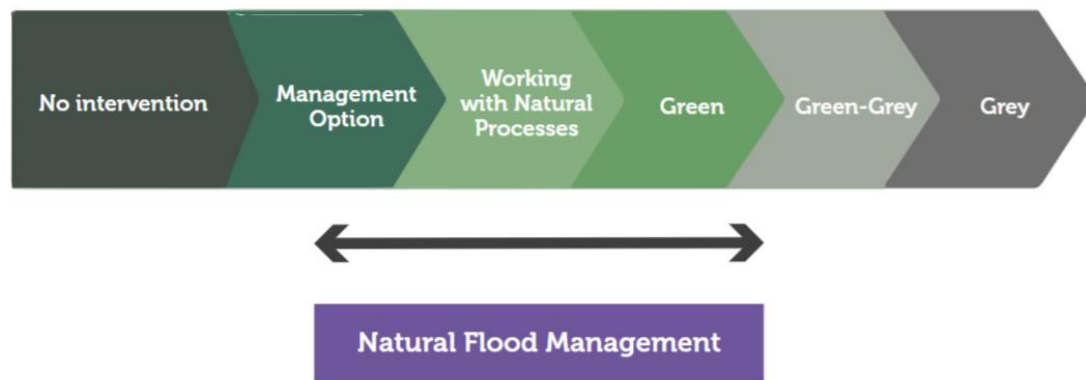


Figure 3: Flood Risk Management Strategy continuum demonstrating ‘softer and greener’ approach of NFM and NBS (Welsh Government, 2020).

Despite the growing enthusiasm for such approaches, research is still limited, particularly for natural flood management. The number of technical studies directed towards quantifying flood risk reduction and environmental benefits comprises the majority of the literature, qualitative studies regarding stakeholder perceptions are still restricted in scope and region (Environment Agency, 2025; Zhu *et al.*, 2025; Wingfield *et al.*, 2021; Wells, 2019; Morris and Tippet, 2024; Bark, Martin-Ortega and Waylen, 2021).

Understanding stakeholder perceptions is essential for delivering approaches, such as NFM, and can play a particular role in successful implementation. Perceptions can dictate the schemes' acceptance, quality and effectiveness (De Gooyert *et al.*, 2017; Gregory, 2000; Read, 2020; Newig and Fritsch, 2009). Therefore, with this in mind, this research wishes to address current research gaps in stakeholder perceptions, focusing on perceptions and attitudes of Local Authority practitioners regarding natural flood management.

1.1 Aims:

The proposal aims to explore Local Authority practitioners' perceptions and attitudes towards natural flood management (NFM). This research seeks to understand their perspectives and experience of NFM within a professional setting and identify perceived barriers and opportunities. The study intends to provide recommendations based upon these perceived ideas to enhance stakeholder engagement and acceptance, but ultimately improve and accelerate local implementation of NFM.

This research will address existing gaps in the literature by exploring the perspectives of local authorities and political decision-makers in depth, specifically from a Welsh context, an area that is severely underrepresented in current research.

1.3 OBJECTIVES AND RESEARCH QUESTIONS:

To achieve this aim, five objectives have been proposed to help guide the study and directly support the research's purpose.

The objectives are:

- 1) Understand practitioners' definitions and understanding of natural flood management and its principles
- 2) Understand practitioners' attitudes towards natural flood management as a flood risk management strategy
- 3) Understand practitioners' attitudes towards policy support for natural flood management
- 4) Identify the perceived benefits and challenges of natural flood management implementation
- 5) Recommend improvements to enhance and improve local natural flood management implementation

For each objective, two research questions have been proposed to delve deeper into practitioner perspectives and provide a richer understanding of perceptions and attitudes. These research questions are outlined in the table below (Table 1).

Table 1: Summary of guiding questions under the research objectives, to help achieve the overall study aim.

Objective	Research Questions
1	1) How do practitioners define natural flood management, and what key principles do they associate with the approach?
	2) What examples or practices do practitioners consider natural flood management measures?
2	3) How do practitioners perceive the effectiveness of natural flood management in reducing flood risk, and how do these perceptions compare to traditional hard engineering approaches?
	4) How do practitioners differentiate between traditional and natural flood risk management, and what are the key perceived differences?
3	5) How do practitioners perceive the effectiveness of local and national policies to support the implementation and consideration of natural flood management?
	6) How do practitioners perceive current policy in relation to natural flood management - does it actively promote or prioritise natural flood management, or are there conflicts and inconsistencies between policy areas?
4	7) What do practitioners perceive as the main benefits of natural flood management, and what wider benefits do they associate with this approach?

	8) What do practitioners perceive as challenges and limitations of natural flood management, and which do they consider the most significant?
5	9) What do practitioners consider lacking from the natural flood management process, and what suggestions are made to strengthen implementation?
	10) What additional resources or support do practitioners recommend to streamline and aid natural flood management implementation and practice?

1.4 SUMMARY:

In conclusion, this research proposes to explore the perspectives of local authority practitioners regarding natural flood management in a Welsh professional setting. The study aims to influence policy and improve local natural flood management implementations by providing recommendations based on the perceived barriers and challenges currently facing practitioners.

Improving the policy and delivery of natural flood management is crucial for building flood resilience and promoting climate-adaptive, sustainable approaches. Moreover, NFM contributes to a wide array of political and legislative targets. As such, its full integration into policy and acceleration of implementation are vital to maximising its long-term potential and improves our chances to limit adverse climate change impacts.

CHAPTER 2:

2.1 LITERATURE REVIEW OVERVIEW:

Literature reviews are typically used to summarise the current state of literature surrounding a specific topic or area of interest. Therefore, the following review aims to summarise the current state of knowledge and research regarding natural flood management. Topics covered include NFM as a concept and practice, governance of NFM, and existing research on stakeholder perceptions of the approach.

2.2 NATURAL FLOOD MANAGEMENT – A CONCEPT AND A PRACTICE:

Although the definitions of natural flood management vary depending on the author (Lane, 2017), they share the same meaning. Prevailing definitions explain natural flood management as a flood reduction technique through the protection, restoration, and mimicry of natural hydrological processes across a catchment (CIRIA, 2022; SEPA, 2015; JBA Consulting, 2023; DEFRA, 2020). Other interchangeable terms include nature-based solutions (NBS), slow the flow, working with natural processes and sustainable land management. Yet, natural flood management appears to be the preferred term (Lane, 2017).

NFM works in three ways to reduce flooding within a catchment: increase infiltration of water, slow the flow of water across the landscape and increase water storage throughout the catchment (CIRIA, 2022; SEPA, 2015; UK Parliament, 2020). To achieve these aims, many measures can be implemented under NFM but tend to fall under one of four categories: river and floodplain management, woodland planting, runoff management and coastal and estuary management (Cumbria Strategic Flood Partnership, 2017; Environment Agency, 2025). Figure 4 provides further information on the techniques used across the catchment under NFM. While the diversity of options offer plenty of opportunity for implementation, small-scale leaky barriers (Figure 5) and woodland planting are the measures most commonly seen (JBA Consulting, 2023).

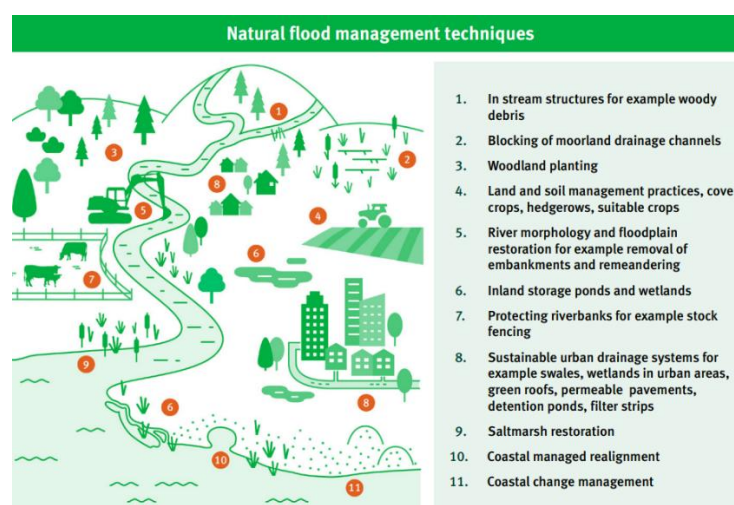


Figure 4: Natural Flood Management techniques (CIRIA, 2022).



Figure 5: Leaky barriers and river restoration example taken from the NFM manual (CIRIA, 2022)

While providing flood risk reduction benefits, the natural and environmental approaches used under NFM also offer other essential benefits to the broader network (Wells *et al.*, 2020; Morris and Tippet, 2024; Wells, 2019; Hill *et al.*, 2023). Benefits include habitat and amenity green space creation, reduced erosion and sediment movement, improved water and air quality, and building of ecosystem resilience (CIRIA, 2022; Cumbria Strategic Flood Partnership, 2017; CBEC, 2017; Environment Agency, 2025; Welsh Government, 2020). Considering all these additional benefits, it is unsurprising that there is a growing body of support for natural approaches.

Traditional flood risk management, often referred to as hard or grey infrastructure, typically works by separating people and water, often at a higher cost, in localised areas at larger scales (CIRIA, 2022; UK Parliament, 2020; Zhu *et al.*, 2025; Wingfield *et al.*, 2019). Although it conventionally receives the majority of capital funding, and can be easily backed by quantitative evidence, increasing recognition is given to NFM as the future solution to complement traditional flood defences (Vann, Marjoribanks and Chmutina, 2025; Lane, 2017; Kingsbury-Smith *et al.*, 2023; CBEC, 2017; Cornelly *et al.*, 2023). Overall, flood risk management is moving away from inflexible grey structures alone, towards sustainable approaches that can adapt and provide resilience in a changing environment – like natural flood management (Bark, Martin-Ortega and Waylen, 2021; Morris and Tippet, 2024; Bernello, Mondino and Bortolini, 2022; SEPA, 2015; Iacob *et al.*, 2014; Wang *et al.*, 2022).

2.3 GOVERNANCE OF NATURAL FLOOD MANAGEMENT:

Governance of NFM refers to the structures, processes, and actors involved in planning, constructing, and delivering natural flood management schemes under general flood risk management.

Actors of NFM governance within Wales can be summarised in Figure 6 below, highlighting the polycentricity of flood risk management (Welsh Government, 2020; Newig and Fritsch, 2009). For NFM in particular, the Welsh Government are responsible for integrating NFM and nature-based solutions into the National strategy (Welsh Government, 2020). While local authorities are responsible for delivering local flood risk strategies, they are also accountable for implementing natural flood management schemes (Welsh Government, 2020; Read, 2008).

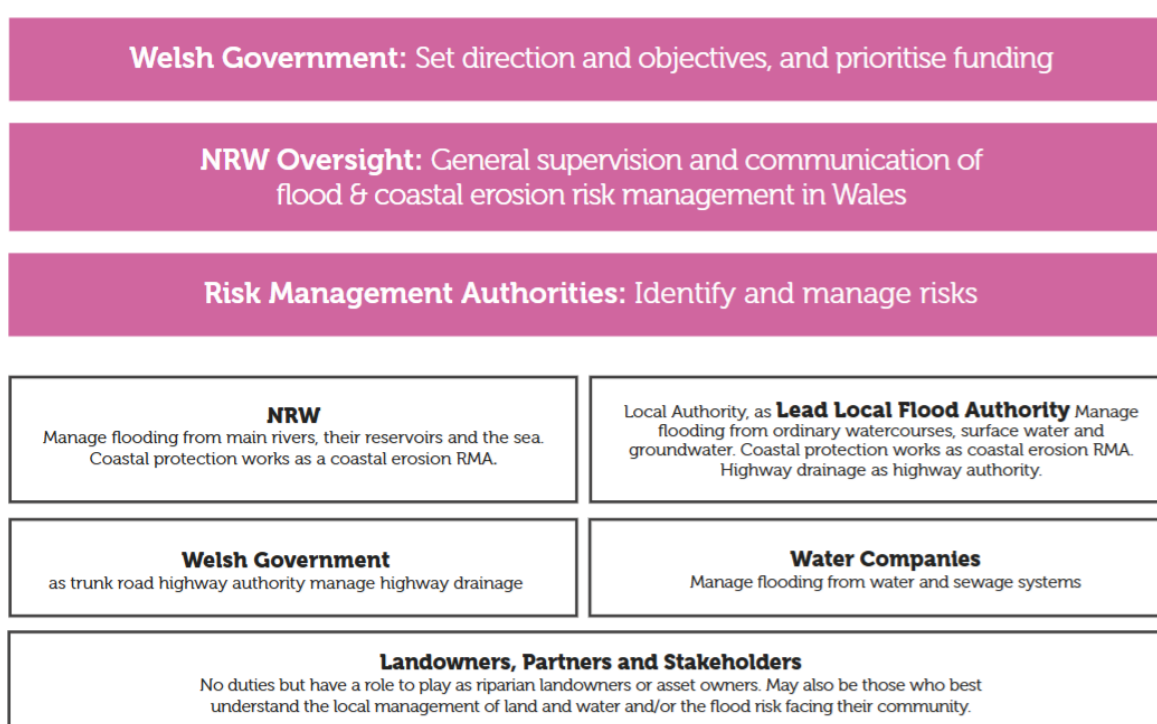


Figure 6: Overview of actors and their responsibilities within general flood risk management (Welsh Government, 2020).

The National Strategy for Flood and Coastal Erosion Risk Management (FCERM) is the overarching framework for flood risk management and sets out a vision for managing flood risk (NRW, 2023). Operating under the Flood and Water Management Act 2010, the Flood Risk Regulations 2009 and the EU Floods Directive (2007/60/EC), and following the principles set out in Figure 7, the FCERM strategy itself along with supplemental guidance has listed natural flood management as a national priority across Wales (Welsh Government, 2010; Environment Agency, 2025; UK Government, 2020).

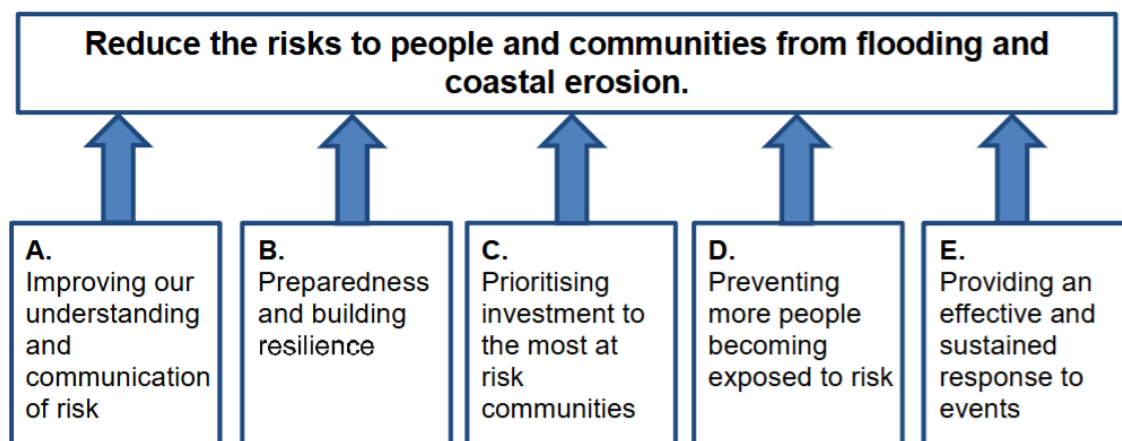


Figure 7: Aims and priorities of the Welsh National FCERM strategy (Welsh Government, 2020).

Accompanying the growing prioritisation is the increasing availability of capital funding and budget allocations for natural flood management (Vann, Marjoribanks and Chmutina, 2025). The NFM pilot initiative (2020-2023) secured over £3 million to support 15 schemes, its successor, the NFM accelerator initiative (2023-2025) received an additional £2 million, while a further £2 million from the FCERM budget has been ringfenced for NFM for the next year (DEFRA, 2020; Welsh Government, 2025; Welsh Government, 2020). Demonstrating the expanding capacity for NFM across Wales.

Overall, political and financial support for NFM has improved vastly over the last five years. However, while broad improvements are being made, barriers, capacity constraints, and a lack of long-term funding streams have restricted local implementation.

2.4 EXISTING RESEARCH ON STAKEHOLDER PERCEPTIONS:

Although several studies focus on stakeholder perceptions of natural flood management, a significant proportion concentrate on landowner and land manager perspectives (Bark, Martin-Ortega, and Waylen, 2021; Morris and Tippet, 2024). While several of them include practitioner perspectives from the land and water management sectors, local authority practitioner views are still marginalised.

Key studies including Bark, Martin-Ortega and Waylen, 2021, Morris and Tippet, 2024, Wells, 2019, Wells *et al.*, 2019 and Wingfield *et al.*, 2021, have found that views of practitioners, although supportive of NFM like landowners, tend to have diverse views, critiques and concerns of the approach. Public stakeholders, including landowners, land managers, farmers and NGO agents, typically concern themselves with loss of productive income, compensation and wider benefits (Holstead *et al.*, 2017; Wells *et al.*, 2019; Wingfield *et al.*, 2021). Professional stakeholders, covering government and local authority practitioners, academics, and flood engineers, view NFM more favourably, but highlight institutional barriers, lack of proficient quantitative evidence and landowner and maintenance disputes as particular concerns (Morris and Tippet,

2024; Bark, Martin-Ortega and Waylen, 2021; Bezak *et al.*, 2024; Waylen *et al.*, 2018; Ferreira *et al.*, 2021).

Geographically, the literature is far from representative, with studies exclusively occurring in Scotland, Northern England and the Midlands. Moreover, while studies have compared a wide selection of stakeholder groups, none have studied a single group in depth.

2.5 SUMMARY:

The literature review reveals that while natural flood management is gaining recognition and support, persistent barriers continue to hinder its reach. Although stakeholder perception studies exist, none exist within the scope of Wales, nor do they explore local authority perspectives in depth. Therefore, this research addresses critical gaps within the literature by exploring the perspectives of an underrepresented group in Wales, offering valuable insights to improve NFM implementation and providing the basis for informed comparisons with broader UK trends.

CHAPTER 3:

3.1 INTRODUCTION:

Methodology is often regarded as the pivotal point of research, wherein the robustness of research depends on the methods chosen to suit the study's rationale and the appropriate justification of these methods for the study (Kothari, 2004; Creswell, 2007). Clear and relevant methodology not only sets out the plan for the study, but also ensures the study is ethically sound, transparent and logical, which are essential considerations in any research project (Arfiri, 2018; Burkhardt, 2012). Therefore, the following chapter aims to set out the methodology for the proposed research, justifying choices and outlining the limitations and ethical considerations of the research to gain approval for the intended dissertation project.

3.2 RESEARCH DESIGN:

In terms of research design, the general blueprint that can dictate how a study is conducted, there are three general groups: qualitative, quantitative, and mixed methods (Burkhardt, 2012). These designs generally depict the type of data that is collected, the methods in which it is collected and analysed, and the overall manner in which a research question is answered. However, the choice of research design is mainly driven by the study's purpose and the project's intended outputs.

As my research is to explore how individuals understand, perceive, and interpret a phenomenon, the qualitative research method was chosen. The qualitative research design is the most appropriate fit for the project as it aims to explore the meanings and interpretations of experiences and phenomena (Piekiewicz and Smith, 2014). Therefore, applies directly to the aim of exploring practitioner perspectives towards natural flood management.

Qualitative studies, in some cases, are considered to be inferior to other research designs (Crinson, Leontowitsch and Morgan, 2016). However, in terms of exploring perceptions and interpretations at depth, which is the aim of this study, it is regarded as the superior strategy. Many have commented on the ability of qualitative studies to explore and highlight nuanced or shared experiences (Vaughan, 2016; Islam and Aldaihani, 2022), which have emphasised their application to smaller, purposive samples for an in-depth and richer analysis. Therefore, it feels like the most appropriate option for my proposed research.

3.3 RESEARCH PHILOSOPHY AND WORLDVIEW:

Research philosophies and worldviews are commonly referred to as the underlying beliefs and assumptions of research, which dictate the knowledge of reality, the nature of knowledge, and the source of knowledge (Creswell, 2007). These beliefs and assumptions generally shape our research and are considered fundamental components for a coherent and well-justified research study.

My research concerns understanding and interpreting practitioners' subjective views on natural flood management, so an epistemological stance and an interpretive worldview will be applied.

Epistemology is the philosophy that is concerned with the nature of knowledge, and in particular, what knowledge is, how knowledge is formed, and how this knowledge is valid (Creswell, 2007; Creswell and Poth, 2016; Moustakas, 1994). This philosophy is most applicable to the research as it acknowledges that 'reality' is subjective and socially constructed and that there are multiple legitimate perspectives. Therefore, it suits the concept that individuals' perceptions and attitudes towards natural flood management will differ based on their 'lived experiences' and interactions. Thereby, aligning with the aim and objectives of the study to explore these perspectives.

Similarly, interpretivism, or interpretivist phenomenology, is the worldview that views knowledge as a subjective experience but focuses on understanding how individuals make sense and attach meaning to these experiences to understand their perceptions and attitudes towards a phenomenon (Eatough and Smith, 2007). The concept has been applied to gain deeper understandings of individual perspectives and is used to capture nuanced and insightful opinions from a range of niche communities (Pham, 2018; Alase, 2017). Due to its relevance, this approach will be adopted to produce detailed and extensive accounts of practitioners' perceptions towards aspects of natural flood management for this study, to fully explore the perspectives of the individuals in this niche community.

3.4 RESEARCH APPROACH:

Research approach refers to the overarching logic or strategy used to conduct a study, which takes into account the design, worldview, and philosophy. These approaches guide the methodology for collecting, analysing, and interpreting data.

The interpretive phenomenological analysis (IPA) strategy will be used to conduct the research, complementing the overarching goal and adhering to the researcher's beliefs and assumptions (Pietkiewicz and Smith, 2014). The IPA strategy perfectly matches the study's goal as the approach assumes that humans are self-interpreting beings and, therefore, focuses on making sense of the meanings individuals give to phenomena (Pietkiewicz and Smith, 2014). The IPA has epistemological roots and aims to seek patterns between perspectives and meanings of shared phenomena (Tuffour, 2017).

Within the IPA approach, sample sizes are generally small, focusing on depth of analysis over breadth. Consequently, researchers using the IPA strategy must recognise the potential for bias to arise from subjective data, particularly within a small sample (Eatough and Smith, 2007; Alase, 2017; Moustakas, 1994). Therefore, validation of patterns requires in-depth analysis of individual meanings before comparing groups of individuals and demands that researchers 'bracket' their own views to ensure study integrity and credibility. As this study is purely an interpretive exploration of local authority practitioners' views and attitudes towards, and considering the theoretical

framework behind the study, utilising the IPA approach for data collection, analysis, and interpretation appears to be the most suitable option for this research.

3.5 DATA COLLECTION TECHNIQUES:

Data collection techniques are tools and methods used to collect rich, detailed information for research. While there are a range of options for qualitative studies, including focus groups, surveys, observation, and case studies, interviews tend to be the most popular option (Moustakas, 1994).

Interviews are most commonly suited to qualitative studies, particularly interpretive phenomenological research, as they allow the collection of in-depth and complex data to provide insightful interpretations (Creswell, 2007; Pietkiewicz and Smith, 2014). While other options, such as surveys and focus groups, can attain insightful information, they generally lack the scope and depth of data that interviews can provide, including non-verbal and visual cues given by the interviewee.

The structure of qualitative interviews can be split into three categories: unstructured, structured and semi-structured. Unstructured interviews allow deep, exploratory analysis of responses but restrict comparisons, and structured interviews follow a strict question list but restrict depth of exploration (Pollock, 2025). Semi-structured interviews form the ideal balance between the two, providing flexibility to explore topics in-depth and ensuring specific research objectives are answered within responses (Islam and Aldaihani, 2022; Qu and Dumay, 2011).

Semi-structured interviews are considered an effective method for interpretative research. When well-planned, they can produce a rich dataset for detailed analysis and interpretation (Qu and Dumay, 2011; Balushi, 2018; Magnusson and Maracek, 2015). Moreover, with the increasing power and accessibility of technology, interviews can be conducted on live online calls. Although inferior to in-person interviews for their inability to capture all visual and non-verbal cues, they offer more flexibility and accessibility to participants. Therefore, semi-structured interviews are the most obvious choice, enabling the project to gather rich and thorough data.

3.6 DATA ANALYSIS TECHNIQUES:

In qualitative research, data analysis involves identifying patterns, themes and meanings from qualitative data. Although it is considered weaker than quantitative statistical analysis, selecting the proper analysis technique is essential to producing credible but meaningful research (Creswell and Poth, 2016; Braun and Clarke, 2006).

Thematic analysis is a commonly used technique for identifying patterns and themes (Tuffour, 2017). Although it could be used to identify similarities across individuals, it does not allow for an in-depth and rigorous interpretation of individual responses (Pietkiewicz and Smith, 2014). Therefore, thematic analysis will be utilised under the interpretive phenomenological analysis approach to better understand subjective experiences and the overall analysis of common and shared themes. In a sense, IPA takes thematic coding a step further to provide additional and more rigorous analysis and

derive patterns of meaning and subjective perspectives from the data (Islam and Aldaihani, 2022). Thematic analysis and IPA follow the same general analysis process, including familiarisation, initial code generation, theme identification, review and overall interpretation (Braun and Clarke, 2006; Alase, 2017). As mentioned, IPA takes that analysis one step further, first to identify themes and meanings within individuals, but secondly to repeat the process among individuals.

Though IPA and thematic coding can be done by hand, advances in technology offer faster and more resource-effective solutions to undertake the same analysis (Islam and Aldaihani, 2022). Targeted applications such as NVivo have been regularly used to undertake thematic analysis. Still, an emerging use of AI software, including ChatGPT and Copilot, has also been noted as a viable option (Sen, Sen and Sahiri, 2023). Both possibilities require input from the researcher to generate analysis outputs. AI software is generally considered a more affordable and accessible option; however, if used, researchers must remain wary regarding data protection and usage by the software (Sen, Sen and Sahiri, 2023).

Overall, thematic coding under the interpretive phenomenological approach remains the most appropriate data analysis strategy for the study as it lends itself to exploring practitioners' perceptions towards NFM and investigating nuanced or shared experiences at depth. However, usage of targeted applications or AI software may depend on the sample size and whether these applications' usage can adhere to data protection laws.

3.7 SAMPLING STRATEGY:

Unlike sampling to achieve statistical significance in quantitative research, qualitative research is concerned with selecting the appropriate individuals who can provide relevant and in-depth information relevant to the study (Magnusson and Marecek, 2015).

Purposive sampling, a strategy that selects individuals based on specified criteria, is often recommended to obtain insights and perspectives regarding a particular area within the qualitative study. It ensures that participants can contribute effectively to the given topic of the research. This study will use purposive sampling to select a small sample of individuals, generally between 10 and 20, as recommended under the IPA strategy (Eautough and Smith, 2017), under the criteria of having existing involvement, awareness and understanding of natural flood management. Using this strategy, the identified sample is more efficient in answering the aim and objectives set out in this research, but it ensures that relevant and associated perspectives are captured within the study (Magnusson and Marecek, 2015; Creswell, 2007).

Although purposive sampling is criticised for its limited reach in acquiring and accessing participants for the study, existing professional networks will be utilised in this case to invite participants to study. Participants will be selected using the above criteria from a single organisation, a predominantly rural Local Authority in Wales. Participants must have prior involvement and awareness of natural flood management, but may come from any department, although individuals meeting these requirements tend to work within

the organisation's Flood Defence, Ecology and Environmental sections. Nevertheless, purposive sampling, like many other qualitative studies, appears to be the most suitable for the aim of the study.

3.8 LIMITATIONS, MITIGATIONS AND ETHICAL CONSIDERATIONS:

Although the above methods have been identified as the most appropriate option for the aim and purpose of the study, each option still has limitations and ethical considerations associated with it.

Though qualitative research design with an epistemological interpretive stance is hailed for its ability to deeply understand and explore subjective meanings and experiences, it is limited by its lack of statistical significance and generalisability (Pham, 2018; Crinson, Leontowitsch and Morgan, 2016). Solutions to this include setting out clear aims for the study, which focus on depth of analysis rather than breadth, and the transferability of insights. Therefore, the aim is to explore practitioners' perspectives towards natural flood management and provide solutions to improve local NFM implementation across Wales, which meets these conditions.

Additionally, these approaches are sometimes criticised for their lack of objectivity and potential for bias in their analysis. To mitigate this, literature suggests implementing reputable strategies to guide interpretation, maintaining a reflexive approach and practising 'bracketing' of one's perceptions (Alase, 2017; Eautough and Smith, 2007; Pietkiewicz and Smith, 2015; Magnusson and Marecek, 2015; Moustakas, 1994). To counter this criticism, this research will strictly follow the IPA approach to guide the interpretation systematically, and a reflexive journal will be utilised to demonstrate transparency and enhance the study's credibility. Review of transcripts and interpretation will also be conducted with the relevant participants to ensure interpretations accurately represent and arise from the information solely provided in responses by participants.

While the small sample size may be criticised for its lack of replicable results at a larger scale, the choice of the sample is intentional and appropriate for the study's methodology. The data analysis's depth, rigorousness, and transferability address concerns of replicability (Magnusson and Marecek, 2015; Creswell and Poth, 2016). This study aims to provide deep and insightful perceptions of NFM. Therefore, the sample selection is appropriate for the study.

Ethical considerations are an essential component of qualitative studies, ensuring that the research is valid, credible, and upholds ethical practices. Concerns regarding consent, confidentiality, and data protection will be mitigated throughout the study by adopting a number of reputable practices. Written informed consent will be obtained before commencement of study, outlining the aim of the research, the methodology and participants' rights to withdraw, privacy and confidentiality (Balushi, 2018). All analyses and interpretations will pseudonymise and anonymise any identifying features or remarks, and interpretations will be reviewed with participants (Arifin, 2018). Finally, all data will be kept confidential and stored in a secure location that utilises data encryption.

and two-factor authentication. Generally, data will be maintained according to the current data protection legislation (Qu and Dumay, 2011).

3.9 SUMMARY:

This project will utilise appropriate research methodology and follow strict ethical standards to explore and understand the perceptions and attitudes towards natural flood management by local authority practitioners in depth. Subjective bias and limitations will be limited wherever possible, and good practice will be followed to produce a robust but credible project.

CHAPTER 4:

4.1 CONCLUSION:

This research proposal outlines the study, which aims to explore the perspectives of local authority practitioners regarding natural flood management within a Welsh Local Authority. NFM has gained traction and support in recent years for its role in flood risk management and as an adaptive and climate-resilient solution that provides multiple benefits (CIRIA, 2022). Despite growing interest, barriers to implementation remain, often influenced by stakeholder perception and acceptance.

This study aims to address the notable gap within current research. It uses focused and methodological qualitative approaches to gain an in-depth understanding of participants' attitudes and perceptions. The research findings could inform and improve policy, enhance stakeholder engagement, and accelerate and improve local natural flood management implementation.

In summary, this research aims to contribute towards effective flood risk management in Wales by aligning practitioner insights and knowledge with broader environmental and policy goals, supporting a more climate-resilient and sustainable network.

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